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REGIONAL DOCUMENTATION CENTRE

POPULATION AND DEVELOPMENT EDUCATION CELL

ARTICLES AND PRESS CLIPPINGS

VOLUME - 78

(JUNE - 2007)

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STATE RESOURCE CENTRE FOR ADULT EDUCATION
LITERACY HOUSE, ANDHRA MAHILA SABHA
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MICRO-ENTERPRISES FOR EMPOWERMENT OF WOMEN

Dr. Malik B.S, Srilatha Vani

Micro enterprises operating with micro credit employing less than 10 persons have become a major income generating strategy for urban and rural poor. The government of India has launched a number of programmes for promoting self-employment and empowerment of women. Among all the development interventions, micro-enterprises have a proven track record of building economic and social capital with low transaction cost.

Women play a significant and crucial role in number of sectors viz dairy, poultry, horticulture, food processing, garments, handicrafts, fisheries, departmental stores, restaurants, beauty parlor, journalism, tourism, taxi source financial services, xerox services, telecom services, etc. Rural women have emerged as successful managers of earth's natural resources and they are responsible for more than half of the world production from community based enterprises, Women produce half of the world's food supply and account for 60% of the working force. Most women remain deprived of employment opportunities as wage workers because of their family responsibilities, lack adequate of skills and social and cultural barriers. In this context, self-employment or setting up enterprises of their own may become an opportunity for women to earn an income and acquire financial security. A shift from family management to enterprise management may be easier than a shift from paid employment to self employment.

Most of the Women's enterprises tend to be home based because their Micro enterprises can serve four primary responsibilities as home makers major objectives

1. Poverty reduction
2. Employment generation
3. Enterprise development
4. Empowerment of women

EMPOWERMENT OF WOMEN

The empowerment of women goes beyond Increasing the Income of women. The mobility of women and their access to information is strengthened by their process of participation in micro enterprises. Micro enterprise services contribute to an increased diversification of household economic activities, increased reliance on productive activities, and improved economic security. The government has recognized the need for increased involvement of women in the main stream of economic development. The development of micro enterprises for women is an appropriate way to attack poverty at the gross root level by generating income. Self help Groups can play an effective role in promotions of micro enterprises.

CONCLUSION

Micro enterprises had significant relevance in the empowerment of women. There is a need to make enabling provisions for women to establish micro enterprise The need of the hour is to help women overcome the hurdles to set up micro enterprises, and help them achieve self-reliance and become contributors for prosperity of the nation. □

National Dairy Research Institute, Kamat-132 001.

Social venture fund

It's a growth fund that invests with a difference... in the ability and can-do confidence of entrepreneurs from the unprivileged classes.

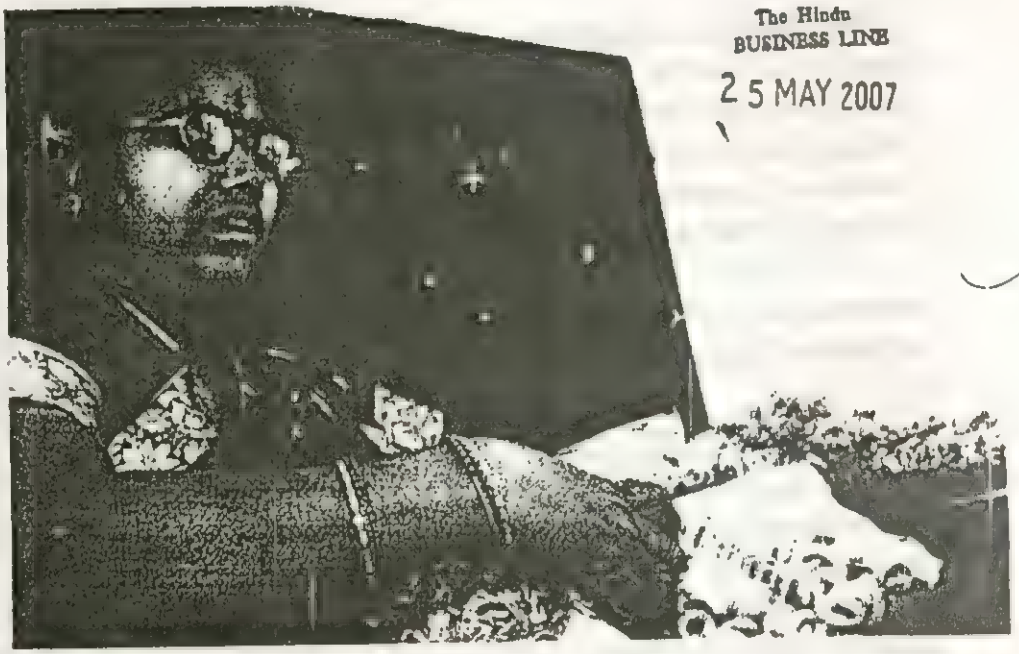
RASHEEDA BHAGAT

The Hindu
BUSINESS LINE
25 MAY 2007

An organisation that has as exciting a story to tell as that of Pradeep Lamba, the Faridabad-based maker of corrugated boxes, is bound to go places. With support and mentoring from the Bharatiya Yuva Shakti Trust (BYST), in 1992 Lamba started his unit, serving the packaging industry. With rapid growth, in a few years his turnover went up from Rs 50,000 to Rs 50 lakh. Then disaster struck in 1997, when a fire destroyed almost everything he had set up. His turnover plummeted from Rs 50 lakh to Rs 5 lakh. "But his mentor, Brigadier Sahukar, an 80-year-old man who was at JK Corp then, said as a military man, 'I don't care what you have to do, but get back on your feet'. Today his turnover is Rs 3 crore," says Lakshmi V. Venkatesan, Founding Trustee and Executive Vice President of BYST.

In 1992, she along with JRD Tata set up this NGO, which has over the years created 14,000 entrepreneurs from the unprivileged classes, turning jobseekers into job creators. "Every person we support creates 10 jobs; for every rupee we lend they create 10 rupees in wealth. Amazing things happen when we take on board entrepreneurs with fire in their belly, people from the grassroots who are not willing to sit back, support them with loans and mentoring — which is the key." Criteria for BYST help — 18-35 age group and a lower economic status.

A group of BYST's entrepreneurs have catapulted their business ventures to such a high, that the BYST is creating for 50 of its entrepreneurs, whose turnover has exceeded Rs 1 crore, a venture fund with a social objective.



Frying pan to... Pushpa, a school dropout, opened a savouries business that today has a turnover of Rs 1 crore. K. RAMESH BABU

CHALLENGE FROM BANKS

But the challenge for the BYST "particularly for those who have grown from Rs 50,000 over a few years to Rs 50 lakh-1 crore, is that banks are still talking about assets and collateral and security. You take a loan, get a six-month moratorium, and you have to start paying back," says Lakshmi.

She argues that the IT industry has had a spectacular growth thanks to access to the concept of venture capital where loans didn't have to be returned immediately. But while the IT companies had an exit route either through IPOs or the M&A route, this is not possible for BYST entrepreneurs. "These people are not going to do an IPO, at least not in the near future. And they are not going to make acquisitions."

So BYST had to innovate; after discussions with venture funds such as Infinity and examining international benchmarks, it has hit upon the concept of a venture fund with a social objective that will give its entrepreneurs loans from Rs 25 lakh to Rs 1.5 crore, with guarantees in place from the BYST side. "We told them that since we can't repay the money even after five years through an IPO or M&A, how about taking a percentage of stake in my royalty — either my profit margin or revenues."

The result is the setting up of the BYST Growth Fund, with a seed capital of half a million dollars from the IFC. Beginning with this seed capital the plan is to step up the fund to $3-5 million through various means. If this growth fund is a success, the IFC will replicate the venture in other countries.

Lakshmi says that while the Youth Business International is present in 40 countries, "none of them have grown to our size as we always think of innovative ways to keep growing."

Explaining how the loans would be given, she says: "Suppose Lamba is given a Rs 1 crore loan, he'll return it this way; a certain amount will be in the form of equity — less than 5 per cent — that will be repurchased after fresh valuation at a stipulated time. The borrowers will also pay a certain percentage of their royalty — either profits or revenue."

A certain percentage would be plain debt, with the interest component being that charged by commercial banks. The ratio component will depend on whether it is a fast-growing company but with low profit margin, or one with a much higher profit margin.

BYST hopes to raise the rest of the money from a variety of sources — corporate foundations, high net worth individual investors, including those from the Silicon Valley. "I'd say the closest comparison is to the angel investor funds which are a little more socially driven. We're promising a return of around 5 to 6 per cent, which is not bad, because we're also giving them the social dividend of employment and wealth creation." On her radar are people such as "some of our Board members — I can't give you names as yet, entrepreneurs who have sold their companies, people who have done IPOs and got huge money."

The fund is being outsourced and will be managed by the Andhra Pradesh Industrial Development Corporation. At the moment only BYST entrepreneurs will get loans from it, but once it is fine-tuned, it would be opened to others. "There is no reason why India cannot use a $300 million fund because there are immense possibilities in all regions of the country."

CORE STRENGTH

BYST's strength is that it not only closely knows its entrepreneurs but also regularly tracks their businesses through its mentors. She is amazed by the BYST members' capacity to raise the bar all the time. "The extent to which you can develop leadership and growth in an individual is unlimited. Not only do many entrepreneurs speedily absorb what the mentors tell them, they quickly graduate and are ready to move further up."

The Fund is being registered by SEBI and hopes to be operational by the yearend. BYST has an ambitious growth plan; growing from 3,000 to 30,000 mentors around the country and to create from 10,000 to 1 million jobs within 10 years. "We're upgrading our mentors' skills by training and international accreditation. City & Guilds, a UK-based international accreditation agency, is going to accredit our mentors," adds Lakshmi.

For the smaller entrepreneurs who need loans of only Rs 2-4 lakh, BYST is latching on to the credit guarantee scheme of the Government of India where a chunk of the loan is guaranteed by the government. "This is not something new, even earlier banks were told either you lend money to the priority sector or land your money in government securities. But that's not an option now. Now with the credit guarantee scheme the government is clearly telling the banks: 'Thou shall lend!'"

Says T.L. Viswanathan, Chair of the strategic committee, BYST, Chennai chapter, "We realised there is so much money lying in banks because the question of collateral comes up. And right now there is a lot of talk of public-private partnership, so we thought of taking the bull by its horns, talked to Chairman of Indian Bank as also a private bank. We've signed an MoU to do a pilot with Indian Bank in Chennai. We will give them about 60 entrepreneurs who have graduated and done well; they require loans up to Rs 5 lakh. We've guaranteed continued mentoring, so they have good quality entrepreneurs."

Lakshmi adds that BYST has an ambitious goal of creating one-lakh entrepreneurs who will in turn create one million jobs. "Our core strength is that we are creating this private-public partnership, not for airports and roads, but for youth entrepreneurship. And in this task we seek partnership from banks and people with business experience to serve as mentors. Another partnership missing in the loop is infrastructure. Most businesses need commercial places to operate from. They cannot operate in a shed or a backyard even in a rural area, because you need high quality power connection, transport and connectivity. We need help in this area so we can continue to grow quality entrepreneurs."

Even in rural areas, there is potential, as was proved by Pushpa, a Std VIII dropout from rural Andhra Pradesh. She started making *murukku* in 2001, soon moved to packaging; today her turnover is close to Rs 1 crore and she employs 100 people. She has requested for a loan of Rs 75 lakh!

Response may be sent to rasheeda@thehindu.com

Insight

What Does Budget 2007-08 Offer Women?

A closer look at the gender budgeting statement in the Union Budget 2007-08 reveals that programmes and allocations remain plagued by "mistakes", with several schemes wrongly prioritised as being exclusively for women. The fact that women have begun to figure in the annual financial exercise of the government is a laudable step, but there remains a need to prioritise women in all development schemes of the government.

YAMINI MISHRA, BHUMIKA JHAMB

There is growing awareness of gender sensitivities of budgetary allocations. Fifty ministries/departments have set up gender budgeting cells...We have made a sincere effort to remove the errors that were pointed out in last year's statement.
– Excerpts from the finance minister's budget speech for Union Budget 2007-08.

This is reason for cheer. Public expenditure until a couple of decades ago was perceived as gender neutral. So were budgets. The struggle of the women's movement to get the government to even accept the notion of gender budgeting, to then take it on and subsequently to get the government to prioritise, has been a long drawn one and this is a considerable achievement. The statement of the finance minister also shows a level of openness on the part of the government in accepting mistakes[1] as pointed out by a civil society organisation and efforts at correcting those.

The gender budgeting statement that is being presented as part of the union budget documents for the third year now is an important document to look at, since it reveals in black and white, the seriousness of the government's commitment to the women of this country. Government commitments, unless backed by funds, are meaningless. This year's budget was also important for two more specific reasons. First, because Budget 2007-08 is the fourth of the five budgets that the UPA government will present. Thus, this was the second last chance for the UPA to allocate resources for the promises made under the National Common Minimum Programme, where one of the six basic principles of governance spelt out is a commitment to empower women politically, educationally, economically and legally and ensure equality for them. Secondly, 2007-08 is the first year of the Eleventh Five-Year Plan and, therefore, Budget 2007-08 should have reflected the changes in priorities for women. The Tenth Five-Year Plan had set out certain monitorable targets for women which included reducing gender gaps in literacy and wage rates by at least 50 per cent in 2007; reduction of maternal mortality rate to 2 per 1,000 live births by 2007; increasing the representation of women in premier services and the parliament, etc. Disappointingly, the report of the Mid Term Appraisal of the Tenth Five-Year Plan, in the very next paragraph (where it mentions these targets), accepts unapologetically that "the goals appeal almost impossible to achieve".[2] The Approach Paper to the Eleventh Five-Year Plan, with its focus on seeking to "include the excluded" sets out its target as "...the 11th Plan Strategy for gender equity must pay attention to all aspects of women's lives...from freedom from patriarchy to specific issues such as clean cooking fuels, care for pregnant women, dignified spaces for violated women...". While the details of the Eleventh Five-Year Plan are still to be finalised, the plan is no less ambitious in any manner and thus allocations need to reflect these priorities. If the process of five year plans is to be taken as a serious exercise, then annual budgets have to reflect these priorities.

This paper attempts to scrutinise the gender budgeting statement presented in the Budget 2007-08. Section I highlights major thrusts of the gender budgeting statement, including the magnitude, the breadth and depth of the exercise. This section also highlights the anomalies corrected in the statement and those that still remain. Section II is an attempt to scrutinise the pool of money available to women, as per the gender budgeting statement, for its priorities. Three distinct lenses have been used for this purpose – sectoral, human rights and those of women most marginalised and vulnerable.

I
Gender Budgeting Statement

The gender budgeting statement presented in the budget, the third one of its kind, is an attempt by the government to cull out from its budget documents, the amount of money that is targeted at women. In a nutshell, the statement says that according to the budget estimates, Rs 31,177.96 crore will be used exclusively for women in the year 2007-08. Like the previous years, the statement comprises of two distinct parts – Part A details schemes in which 100 per cent allocations are for women and Part B reflects schemes where the allocations for women constitute at least 30 per cent of the provisions. This section examines this statement in details.

The magnitude: The total magnitude of the gender budget has gone up from Rs 22,251.41 crore for 2006-07 (Revised Estimates) to Rs 31,177 crore in 2007-08 (Budget Estimates), an increase of almost 40 per cent, which is substantive despite the rate of inflation. As a percentage of total union government expenditure, this constitutes a rise from 3.8 per cent to 4.8 per cent. (For 2007-08 BE, the total expenditure of the government has been taken as Rs 6,40,521 crore, excluding the Rs 40,000 crore of non-plan transaction to be undertaken in 2007-08 relating to transfer of RBI's stake in SBI to the government.) As a percentage of GDP at market prices, this is an appallingly low figure of 0.5 per cent and 0.6 per cent for the

years 2006-07 and 2007-08, respectively. And just to remind ourselves, women constitute more than 48 per cent of India's population (2001 census).

Table 1 presents some basic dimensions of gender budgeting statements over the years.

The breadth: As clearly depicted by Table 1, there has been an increase in the number of ministries and departments undertaking gender budgeting exercises that form the basis of the gender budgeting statement of the government, i e, it has expanded up to 33 demands for grants under 27 ministries/departments and five union territories. The finance minister in his budget speech this year has also pointed out that 50 ministries/departments have set up gender budgeting cells, so there is a strong likelihood that in the coming years more and more ministries and departments will be part of this exercise. This is encouraging. Since gender budgeting being a rather recent endeavour, a larger number of ministries and departments preparing these statements reflects, if not anything else, at least the growing realisation within the government about the relevance of this exercise.

It is also encouraging that this exercise is limited not just to the historically perceived "women related" ministries, even ministries and departments like department of science and technology, department of biotechnology and department of industrial policy and promotion, have undertaken this exercise. Though, it must be pointed out that several important sectors for women like water supply and sanitation, which have huge gender dimensions, still do not find a mention in the gender budgeting statements presented in successive union budgets.

The depth: The finance minister's acknowledgement of the errors in last year's statement was encouraging. Several mistakes in last year's statement have been corrected. For instance, the Integrated Child Development Scheme (ICDS) has been shifted from Part A of the statement to Part B of the statement. This reflects the acceptance that ICDS is a scheme primarily for children and not for women. This has important implications on the gender budgeting statement as allocations for ICDS have been significant and this scheme alone consumes as much as 89 per cent of the allocations of the ministry of women and child development.[3] Likewise, similar mistakes in the allocations under ministry of health and family welfare and the ministry of social justice and empowerment in last year's gender budgeting statement have also been corrected.

Unfortunately though several mistakes remain in this year's statement too – ranging from calculation errors to errors due to lack of clarity on the concept and more importantly, errors resulting from patriarchal ways of analysing also are still to be found in the gender budgeting statement. Some of these are:

– 100 per cent allocations on contraception under department of health and family welfare have been treated as exclusively for women reinforcing the stereotype that anything to do with contraception and family planning is exclusively for the benefit for women and women's concerns. By that logic then 100 per cent allocations on defence could also be treated as "exclusively for women" since it provides "security" to women! Moreover, the ministry's own performance Budget 2006-07 reveals that each year from the period 2002-03 to 2004-05, condoms form clearly the largest quantity of contraception supplied by the ministry, far outnumbering the supplies of contraceptives that women use, like oral pills, IUDs, tubal rings, etc.

– 100 per cent allocations under the Indira Awas Yojna (IAY) have also been treated as exclusively for women. One possible justification for this could be that the guidelines under the scheme require the allotment of the dwelling units should be in the name of the female member of the beneficiary household. However, the performance Budget 2006-07 of the department of rural development says that in 2004-05, of the 15.16 lakh houses constructed, 7.38 lakh were allotted to women, 4.32 lakh were allotted jointly to husband and wife and 2.72 lakh were allotted to men. Similarly, for the following year (figures available for until December 2005), 4.95 lakh houses have been allotted to women, 2 55 lakh in joint names and 1.47 lakh to men. Therefore, it cannot be claimed that entire allocations for IAY scheme are women-specific.

– Under the ministry of labour and employment, 100 per cent allocations under the head 'Improvement in Working Conditions of Child/Women Labour' have been put as exclusively for women, though the scheme has been put in Part B of the statement. This is again incorrect because allocations under this head goes to two schemes – the National Child Labour Project (NCLP) and the Indo-US Matching Grants Project (Indus Project). However, the Annual Report 2005-06 of the ministry of labour and employment reveals that the girl child constitutes about 56 per cent of the total enrolment of children in the scheme, remaining are boys. To then

Table 1: Summary of the Gender Budgeting Statement

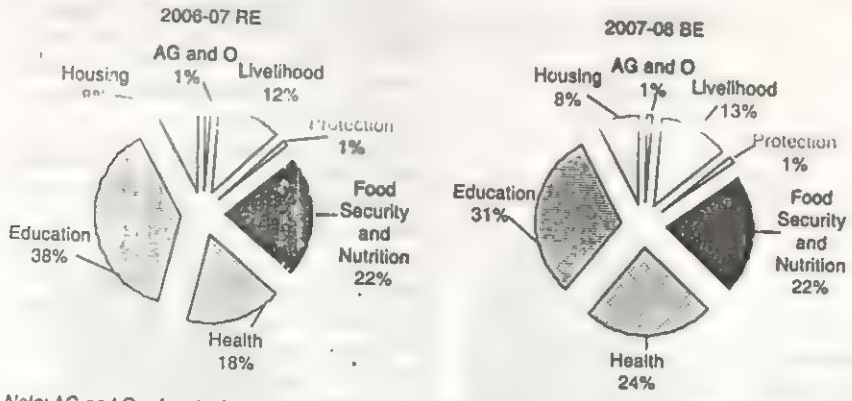
Year	No of Demands in Union Budget Covered	Years	Total Allocations under Part A of the Statement**	Total Allocations under Part B of the Statement***	Total Magnitude of Gender Budget
GB Statement presented in 2005-06	10	2005-06 BE	Rs 14,378.68 crore		Rs 14,378.68 crore
GB Statement presented in 2006-07	24	2005-06 RE	*(Allocations were not divided in Part A an 1 B that year)* Rs 8,273.88 crore	Rs 15,966.63 crore	(4.74 per cent*) Rs 24,240.51 crore
	24	2006-07 BE	Rs 9,575.82 crore	Rs 19,160.71 crore	(4.77 per cent*) Rs 28,736.53 crore
GB Statement presented in 2007-08	33	2006-07 RE	Rs 4,618.95 crore	Rs 17,632.46 crore	(5.10 per cent*) Rs 22,251.41 crore
	33	2007-08 BE	Rs 8,795.47 crore	Rs 22,382.49 crore	(3.8 per cent) Rs 31,177.96 crore (4.8 per cent*)

Notes: * Proportion of Total Union Government Expenditure.
** Part A presents women specific provisions where 100 per cent provisions are for women.
*** Part B presents women specific provisions under schemes with at least 30 per cent provisions for women.
Over the three-year period, the number of demands for grants covered has grown and this could be an important factor in the increasing magnitude of the total allocation.

Source: Gender Budgeting Statement, Expenditure Budget Volume I, Union Budget – various years.

4

Figure 1: Scrutinising Gender Budgeting Statements from a Sectoral Lens



Note: AG and O refers to Awareness Generation and Others.

put 100 per cent allocations under NCLP as exclusively for women, is wrong. Likewise, for the Indus Project, the percentage of public expenditure on women/girls is approximately 44 per cent of the total public expenditure under the scheme for the year 2004-05. Therefore, once again considering 100 per cent allocations under the scheme as exclusively for women is wrong.

– Several schemes under ministry of youth affairs and sports, although stated in Part B of the statement, have put 100 per cent of its allocations for women. This includes schemes like Nehru Yuva Kendra Sangathan, National Service Scheme, youth hostels, National Service Volunteers Scheme, Rashtriya Sadbhavana Yojna, Institute of Youth Development and other schemes relating to talent search and training. As the names of the schemes suggests, they cannot be exclusively for women. A perusal of the annual report brought out by the ministry also does not indicate these schemes as exclusively for women. Thus, by any stretch of imagination, 100 per cent allocations under these schemes cannot be treated as exclusively for women, unless one argues that promoting national harmony ('rashtriya sadbhavana'), searching for talent among the youth, etc, have not become only the agenda of women of this country!

– There also seem to be some discrepancies in the figures for Reproductive and Child Health (RCH) under the department of health and family welfare. RCH-II, Flexible Pool features in Part A of the statement and again in Part B of the statement, with different figures. Part A reveals that Rs 1,725 crore has been allocated for 2007-08 BE and Part B indicates that Rs 1,546.11 crore has been allocated for 2007-08 BE. Moreover, the total allocations cannot be a sum of Part A and Part B either as this figure would then be higher than what is mentioned in the Expenditure Budget Volume II (Union Budget 2007-08) for the same scheme.

II
Composition of the Gender Budget Pool

It is important to look beyond, at the gender budgeting statement as a pool of Rs 31,177.96 crore. One needs to broaden the analytical framework to assess what this pool has to offer to women in terms of its priorities. This section attempts to scrutinise the government's priorities for women by examining the Rs 31,177.96 crore, (a) from the lens of different sectors, i e, education, health, livelihood, etc; (b) from the human rights lens; and (c) priorities for women belonging to different disadvantaged sections, i e, from the lens of the most marginalised/discriminated women. It is important to point out that this analysis has been attempted with the figures corrected for mistakes pointed in the previous sections.

Sectoral Lens Analysis

For convenience in understanding priorities of allocations in terms of different sectors, the schemes in the gender budgeting statement (parts A and B) have been categorised into the following heads:

(a) Livelihood includes schemes targeted to income-generating activities, formation of small-scale enterprises and those aimed at imparting technical education.

(b) Education includes schemes directly promoting education and scholarships assisting in attainment of education.

(c) Health includes health related schemes.

(d) Food Security and Nutrition includes schemes related to meeting nutritional needs and those aimed at assured food supplies.

(e) Housing includes schemes meeting shelter needs of women.

(f) Protection includes schemes for women in difficult circumstances which aim at protection of women, such as short stay homes, schemes targeted at differently-abled women, etc.

(g) Awareness Generation and Others includes schemes targeted at generating awareness amongst women in areas such as youth activities, women empowerment, etc.

The picture that emerges for 2006-07 and 2007-08 is as shown in Figure 1.

Table 2 presents the sectoral priorities in rupees crores and in percentage.

The gender budget did not undergo significant changes in terms of allocations to various schemes. Taking into account major needs of women, one can see that it is education, health, food security and nutrition and livelihood that are prioritised in the allocations for women. With these sectors absorbing the major chunk, allocations for sectors such as women's protection, housing, and awareness are largely neglected. A closer look at these priorities follows.

Women's education: The major chunk of allocations for women's education can be accorded to allocations in Sarva Shiksha

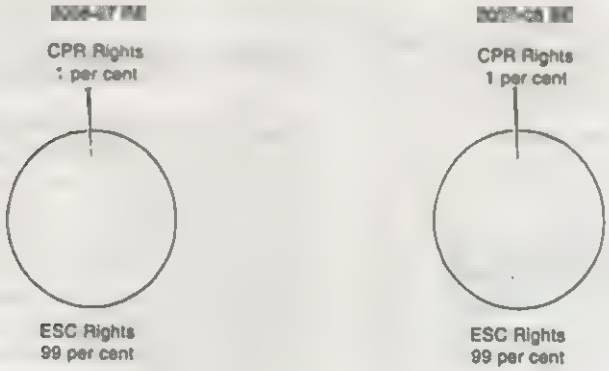
Table 2: Scrutinising Gender Budgeting Statements from a Sectoral Lens

Sectors	2006-07 RE	Percentage	2007-08 BE	Percentage
Women's education	7513.7	38	8439.99	31
Women's health	3593.325	18	6483.03	24
Women's food security and nutrition	4321.77	22	5906.4	22
Women's livelihood	2444.35	12	3582.87	13
Women's housing	1498.39	8	2067.55	8
Women's protection	195.473	1	306.733	1
Women's awareness generation and others	153.41	1	177.43	1
Total	19720.418	100	26964.003	100

Note: Totals do not match with totals in the gender budgeting statements because these have been corrected for anomalies identified in the previous section.

Source: Compiled from the Gender Budgeting Statement, Union Budget, various years.

Figure 2: Scrutinising Gender Budgeting Statements from a Human Rights Lens



Abhiyan (SSA) which has in fact registered a decrease from Rs 5,060 crore (2006-07 RE) to Rs 4,908 crore (2007-08 BE). Although, education secures the largest chunk of funds targeted at women, one must not haste to the conclusion that these are sufficient. Considering the low literacy levels of women in the country as well as the alarming dropout rates (dropout rate in classes I-VIII stands at a whopping 73 per cent according to the 2001 Census), the prioritisation of education although warranted, is still insufficient to ensure better outcomes for the girl child. The allocations on education today are still not even up to the levels promised by the UPA government in the NCMP, which was 6 per cent of GDP.

Women's health: Some increase in the budgetary provisions for women's health can be understood partially due to an increase in allocations in the National Disease Control Programmes. However, keeping in mind that India has one of the highest maternal deaths globally, the allocations still hover around a low figure as a proportion of GDP. According to very recently released results of the National Family Health Survey (NFHS)-III, institutional births accounted for only 40.7 per cent and mothers who received antenatal (at least three antenatal care visits for their last birth) and post-natal care (within two days of delivery from HV/ANM/doctor/nurse/mother health personnel for their last birth) constituted 50.7 per cent and 36.4 per cent respectively. The findings of NFHS-III supplement the plight of women in terms of healthcare facilities and underline the meagre provisions for the same.

Women's food security and nutrition: In terms of percentage, a meagre increase in allocation has been seen for women's food security and nutrition. Women's nutritional needs, especially specific periods such as pregnancy and lactation carry a special importance, where specifically the government's core programme, the ICDS accounts for the major sum. In addition, the mid-day meal scheme roughly accounts for almost an equal chunk in the total budgetary provision. No concrete steps have been taken in the area of food security and public distribution system, taking into account the number of women living in poverty.

Women's livelihood: Budgetary provisions for promoting the creation of small-scale enterprises, and other schemes for the upliftment of overall economic development of SCs and STs shows a slight increase from 12 per cent in 2006-07 RE to 13 per cent in 2007-08 BE. Promotion of such schemes significantly affect the economic empowerment of women, for unless and until women become financially independent, their decision-making power cannot improve significantly. By and large, the allocations can be accounted by Swarnajayanti Gram Swarozgar Yojna (SGSY) and Sampoorna Grameen Rozgar Yojna (SGRY) schemes of the department of rural development. Where it comes to 100 per cent allocation for women's benefits, support to training and employment programmes such as Rashtriya Mahila Kosh, Swayamsidha and Swadhar receive the major sum. In this budget, the National Rural Employment Generation Programme and Prime Minister's Rozgar Yojna have been included in the gender sensitive schemes (Part B), unlike last year.

Women's housing: Access to and ownership of housing and shelter has been another aspect where gender based discrimination is seen in a big way. According to the data collated by the Centre for Housing Rights and Eviction, an international housing rights NGO, women perform two-thirds of the world's total working hours and yet own less than 1 per cent of the world's property. Statistics for India, do not show a different picture either – 70 per cent of the female workforce is still engaged in agriculture, and yet only 10 per cent of female farmers are landowners.[4] Little needs to be said after the presentation of these startling facts.

The outlay for women's housing represents only 8 per cent of the total allocations in the gender budgeting statement.

Women in difficult circumstances: Protection of women is one area which has been largely neglected. The staggering figures of crimes against women time and again point to an extremely inadequate level of budgetary allocations for women's protection shown in the table. Protection holds special importance when talking about women who are in difficult circumstances. In this context, that the government still does not see the need for allocating funds to implement the new Domestic Violence Act, is a deep cause for concern.

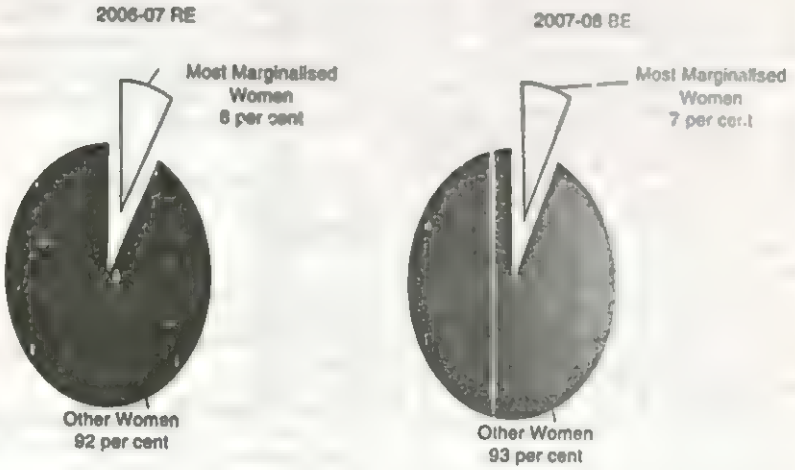
Women's awareness generation and others: Such schemes target overall development, and are placed lowest in the order. The meagre allocation towards generation of awareness for women in various areas raises yet another concern.

Through the Human Rights Lens

The human rights discourse and framework has made a significant contribution to the women's movement and vice versa. The women's movement has often used the human rights framework, and its principles of universality, inalienability and non-discrimination to anchor its struggles, which otherwise often are diluted by arguments of cultural relativism. The women's movement has always argued that whether it is Civil and Political Rights or Economic, Social and Cultural Rights, these are always experienced by women as indivisible and interrelated. Nonetheless, it is important to look at the break-up of the total pool in terms of Civil and Political Rights (CPR) and Economic, Social and Cultural Rights (ESCR) to ensure that neither is neglected and both are as important for women. Figure 2 reveals the priorities of the allocations targeted at women in terms of ESCR and CPR.

One can see that 99 per cent of allocations for women have gone to economic, social and cultural rights and civil and political rights have always got a minuscule chunk of 1 per cent the budget. A possible explanation for such a predominant focus

Figure 3: Gender Budgeting Statements from the Lens of the Most Marginalised Women



on ESCR could be attributed to the Indian Constitution that guarantees CPR as part of the Fundamental Rights as well as the principle of non-discrimination, whereas ESC rights have been left in the domain of the Directive Principles of State Policy in the Constitution for their progressive realisation. Further the acute levels of poverty in India and within this, the growing phenomenon of feminisation of poverty warrants a focus on ESC rights. The 2001 Census figures reveal that two-thirds of people living below poverty line are women. Thus protecting ESC rights of women becomes more important.

Nonetheless, protecting CPR for women is as critical. The blindness of our policymakers to perceive women's CPR as important could be explained to the public-private divide of the mainstream human rights discourse, which the women's movement has always criticised for its patriarchal bias. (The term public-private divide is best explained by the old saying, "a man's house is his castle" implying that the state should not interfere in the private sphere (i e, inside the household) of a man and it is the public sphere which is the primary mandate of the human rights.) Take the issue of violence in women's lives. Statistics compiled by the International Centre for Research on Women (ICRW) reveal the magnitude of domestic violence in India – a staggering 40 per cent of women in India in monogamous marriages – faces domestic violence with about 65 per cent of them reporting psychological abuse as well. Add to this the violence that women experience from outside the family, the centrality of violence in women's lives becomes evident. This is true for women in most countries, whether CPR are guaranteed to them or not. In fact, in India, total crimes against women registered under the Indian Penal Code has actually increased from 3.5 per cent in 1998 to 9.3 per cent in 2004 as presented by the deputy advisor, Planning Commission based on the findings of an earlier study. Furthermore, there is little doubt that such crime figures are always an underestimation. Therefore, the government must increase allocations for realisation of CPR. And once again, this is another strong case for the government to allocate resources for the effective implementation of the new Domestic Violence Act.

Through the Lens of Discrimination

While in our analysis, we focus on the differences between men and women, one must also always bear in mind the differences amongst different sections of women. It is important to acknowledge that women are not a homogeneous group either. One needs to look at women in a framework on intersectionality which emphasises that the various grids of power must be identified and acknowledged, whether it is class, caste, race, disability, rural-urban divide, etc, and it is how a woman is placed at the intersection of these various grids that determines her relative position of power or marginalisation. Women, who face multiple forms of discrimination, being the most vulnerable of the lot, do require special efforts targeted at them.

One of the limitations of the present structure in which our gender budgeting statements are presented is that it gives the impression that women are a homogeneous group, whereas, there is enough evidence to show that gender-based discrimination gets compounded when it interfaces with discrimination on the basis of caste, class, disability, HIV status, rural-urban divide, etc. For instance, even in 2001, about two-thirds of adivasi women and about 60 per cent of dalit women were illiterate. Similarly, a comparison of the under-five mortality rates (per 1,000 live births), in the year 1998, brings out the significantly higher levels of mortality among dalit and adivasi children. Similarly, Muslim women in India also show significantly higher levels of deprivation.

Adopting an intersectional framework becomes very critical as it not only transforms our understanding of an issue and our strategies for dealing with them, but also changes our methodologies for gathering information and data on situations of oppression and subordination of women.

Figure 3 shows how much of the total gender budgeting pool is targeted at women who are most marginalised and discriminated (including dalit women, tribal women, destitute women, women who are differently-abled, women rescued from trafficking, women in short stay homes, etc) and how much of it goes to a generic category of "other women". Note that these figures do not capture the total allocations for most marginalised women, but only those that are targeted at them. This is an important analysis, since even within women, the government must focus sufficiently on the needs of those women who are at the bottom of the ladder.

The figure shows that about 8 per cent (for 2006-07) of the total gender budgeting pool went to women who are most marginalised and the rest was spent on women as a generic category. For 2007-08, this percentage has gone down marginally to 7 per cent. As one argues that gender-neutral allocations are not good enough and the government needs to step up its allocations for women-specific schemes, likewise, allocations assuming women are a homogeneous lot is also not good enough and the government needs to step up its allocations for women who are doubly discriminated and most marginalised

Conclusion

Thus, the only significant measure taken for women in Budget 2007-08 is the inclusion of a few more ministries/departments

in the gender budgeting exercise of the government, and a consequent increase in the size of the gender budget. With regard to most sectors, Budget 2007-08 maintains the status quo for women in India. If one factors in the poor status on women in India as reflected in any number of indicators, Budget 2007-08 presents a disappointing picture. Considering that 30 per cent allocations of all ministries was promised to us in the Women's Component Plan that was adopted way back in the Ninth Five-Year Plan, the budget figures once again reflect how much more needs to be done in prioritising women in all developmental programmes and schemes. Moreover, with revised estimates almost consistently lower than budget estimates for most of the schemes, one doubts if even the funds are being made available for women, ever reaches them.

Another point that deserves specific mention is the significant leap in the allocations for ministry of minority affairs, from a poor Rs 2 crore (2006-07 BE) to Rs 143.52 crore (2006-07 RE) to Rs 512.83 crore (2007-08 BE). Disappointingly though, there is not even a single scheme/allocation targeted at minority women. The gender blindness of the Sachar Committee report seems to have also reflected in the allocations for this ministry.

It is also worth pointing out that gender budget statement being presented by the government, important though it is as an exercise, is just a starting point for gender budgeting. Gender budgeting is not just about looking at specific schemes for women or identifying and listing allocations for women. It is important to take the understanding beyond that since gender budgeting cannot be seen in isolation from the overall political economy scenario. How overall public policies impact on social sectors, agriculture, employment generation and poverty alleviation is far more critical from the point of view of women and thus any assessment of the impact of budgets on women has to be positioned in this context.

For instance, the high rate of inflation witnessed recently would have harsh implications for women. The lack of concerted efforts to strengthen the public distribution system (PDS) in the context of a growing agrarian crisis as well as the declining per capita availability of foodgrain, does affect women. The sharp increase in open unemployment rates in rural and urban areas as shown in National Sample Survey (NSS) data is also an important indicator of the adversities confronting women. Therefore, in the proposals made in the latest budget, we need to look at the policy interventions in several social as well as economic sectors which directly affect the well-being of women in India. EPW

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Notes

[Authors work with the Centre for Budget and Governance Accountability. Authors are particularly thankful to Subrat Das for valuable inputs.]

1 'Gender Budgeting Statement: Misleading and Patriarchal Assumptions', *Economic and Political Weekly*, July 29, 2006.
2 Chapter 4, Women, Children and Development, Mid-Term Appraisal of Tenth Five-Year Plan.
3 Chapter 4, Women, Children and Development, Mid-Term Appraisal of Tenth Five-Year Plan.
4 *Times of India*, March 8, 2007.

A school that trains women to be ideal, submissive wives!

Bhopal, June 11: Unbelievable but true! A special school in Madhya Pradesh actually trains women to become ideal, obedient and submissive wives and daughters-in-law. Though it has many takers, it has drawn the ire of social activists and women's organisations.

Founded in 1987, the Manju Sanskar Kendra in Bhopal teaches young women the art of being good wives by serving their husbands and in-laws, and thereby preventing splits in the family.

"The primary aim of the Kendra is to prevent Indian families from breaking up under the pressures it faces nowadays," says Bhau Ayaldas Hemnani, the founder and director of the rather unique school.

It offers a three-month course that stresses on the importance of "Indian culture" and the woman adjusting to her new family after marriage. While students spend the first month learning Sikh and Hindu scriptures, the second month has lessons in naturopathy and the third is entirely dedicated to domestic life.

Women's rights activists and groups have termed the very idea of the school "ridiculous", anti-women and regressive. They have in fact suggested that schools now be opened to train ideal husbands too.

"We don't have any objection if the centre starts teaching men to be an ideal husband, father or son. It would be a step towards building a balanced society. Why only train girls to be submissive?" asks Sandhya Shelly, state president of the All-India Democratic Women's Association. Chandra Arora of the All-India Women's Council, says: "Thousands of women are doused with kerosene and set on fire by their greedy husbands and their families. Most of these dowry-related deaths are passed off as kitchen accidents. How will they resist dowry or other domestic abuse?"

Contrary to one's expectations, the centre is very popular with over 4,500 having graduated from it so far.

"My bhabhi (sister-in-law) is considered an ideal daughter-in-law in my family, and she motivated me to join the classes here," says Ragini, as student of the school who is to wed next month.

Says Sudha, another student: "The school not only teaches us to be polite and obedient towards our in-laws and the husband but also teaches us cooking, sewing and daily prayers without any fees. It tells us that these are the basic essentials an Indian girl must learn before marriage, regardless of whether she is a working woman or chooses to be a housewife". •IANS

RD/WW

Hindu, 27june,2007

Community radio to boost women's life

TIRUCHI: With a view to increasing scientific awareness and enhancing the quality of life of womenfolk in immediate surroundings, the Department of Visual Communication, Holy Cross College (Autonomous) on Tuesday got its 'Pudhiya Jananam' – Science for Women Project – commissioned with Rs. 16 lakh financial assistance and technical support from the Rastriya Vigyan Evam Prodyogiki Sanchar Parishad, a unit of the Department of Science and Technology, New Delhi.

The one-year project entails creation of awareness and conduct of interactive programmes on topics such as health, hygiene and other factors of daily importance through the College's Community Radio Station – FM 90.4 Mhz – amongst a targeted 1,000 womenfolk residing in Jeeva Nagar and Dharmanathapuram areas. The programmes will be on air everyday from 6.00 a.m. to 10.00 a.m. and from 4.00 p.m. to 8.00 p.m.

To ensure their interesting participation , the Director, Commonwealth Educational Media Centre for Asia New Delhi, presented radio transistors to a section of the women during a function got up to mark the commissioning of the project at the College

Presiding over, Mr. Sreedher said the purpose of the community radio was to create a positive societal impact in the local community. The College was among the 13 chosen institutions in the country, including five in Tamil Nadu, to implement the project, he said, informing that the Central Government was keen to popularise the concept of Community Radio by extending 5,000 licences. Of the 28 in the country at present, 18 were in Tamil Nadu and Pondicherry, he said.

R. Mahadevan, Former Editor, BBC World Service (Tamil), London, urged the students and faculty members to take advantage of the technology and package the programmes with new ideas and innovations for a better reach in the community. Delivering his key note address, Mr. Mahadevan said the consciousness of the targeted community should be awakened at the outset through achievement motivation before going about the awareness initiatives.

Inaugurating the project, A. Shantha, Professor and Head, Department of Journalism and Science Education, Madurai Kamaraj University, observed that the potential of Community Radio was not explored fully as yet. The programmes on need-based topics customised to the local community should be made interactive, she said.

Ujjwala Tirkey, Scientist, Rashtriya Vigyan Evam Prodyogiki Sanchar Parishad, said that through creating scientific awareness, Community Radio was meant to function as a voice for the voiceless in the society.

The Principal Sr. Rosy said science education through the Community Radio would address the issues of poverty and illiteracy in the community. Shirley Deepak, Head, Department of Visual Communication, spoke.

Rural dev/women welfare/aqua

Hindu

For these Irula women, ornamental fish offer a lifeline

K. Manikandan

TAMBARAM: Dozens of concrete and glass tanks greet visitors at Pournami Irular Women Self Help Group in Perungalathur near Tambaram. For the past five years, selling ornamental fish has been the source of livelihood for a number of Irula families.

Over 100 families of this community are on the path towards self-reliance, putting behind them, decades of catching rats, snakes, wild cats and mongoose for a living. "We have been living here for five generations," recalled M. Lakshmi, who, however, is unable to tell her age.

In the past, they were engaged in "smoking out" rats from paddy fields and catching poisonous snakes to extract venom, but decline in agriculture coupled with government restrictions deprived them of this livelihood.

They were left with the job of cleaning houses and other odd jobs. "But that too was restricted after the arrival of gadgets like vacuum cleaners and washing machines," said M. Boopathy. Just when life seemed to be heading to a dead-end for this small segment of a very docile community, they were led into the self help group movement.

No savings habit

"We never had the habit of saving money. After getting initiated into the self help movement, we started by saving Rs. 5 a week," recalled D.Vijaya, president of Pournami Group that was the first group to be started among Irula women in 2002. In 2003, it received an assistance of Rs. 25,000 from Kancheepuram Central Cooperative Bank and started cultivating ornamental fish.

Since then, there has been no looking back. Now there are six groups in the Federation of Irula Women Self Help Groups in Perungalathur with about 75 members. "We get huge orders but we are unable to cope with the demand," Ms. Vijaya said. Most of their customers are individuals maintaining aquariums in houses and retailers.

Last year, the groups received a sum of Rs. 2 lakh, using which, they expanded their operations. The members are able to earn approximately Rs. 1,500 each a month.

Ms. Vijaya's daughter is a final year student in Madras Christian College, Tambaram and is the first from their community to enter a college.

The groups want a piece of land so that this scheme could be expanded to include many more such groups. They also expedite the process of issuing community certificates. A training centre built at a cost of Rs. 8.4 lakh under a central government scheme near their cluster was completed a few months ago, but is yet to be operational.

'Haryana marriage' a boon to Kerala girls

INDIAN EXPRESS 28 JUN 2007

BY P.DIVAKARAN

Payyanur (Kerala), June 27 : The wedding bells toll for them from the distant Haryana. And the brides living in the villages here are too happy to tie the knot with the grooms they see for the first time in their life. But, they live happily ever after.

'Haryana-marriage', a term which does not carry any wrong connotation, has become popular in some of the villages here. The brides, mostly in their thirties, whose parents can't afford to pay dowry or arrange an extravagant marriage function, opt for grooms from Haryana where men find it difficult to get brides of their choice. Incidentally, these hassle-free marriages have come as boon to the unmarried women living with virtually no hope of a married life.

It is in the villages of Kunnaru in Ramanthali, Kunhimangalam and some places forming part of Payyanur municipality that marriages with Haryana men flourish. On a rough estimate, more than 200 such marriages have already taken place in the temples here. The couples leave for Haryana the same day of the marriage with some of the relatives of the bride. Almost all the men who marry the Malayali girls were from Hansi in the Hissar district of Haryana. Significantly, language, traditions, climate or food habits do not make much of a barrier to the family life of these girls. So far, there has been no complaint worth mentioning from these married girls.

Said Surendar, an agriculturist and truck driver hailing from Hansi who married Rathi of Kunnaru, "After marriage the husband and wife move over to their own separate dwelling place, and it is perfectly an independent family life. Men in Hissar district have no problem living with their Malayali spouses."

Said Kakkolath Kalyani, a woman in her sixities who belongs to the Kuannaru village, "So far four girls from my own family have been married to men from Haryana. I have visited their houses several times and they are satisfied with their lives." According to the local people, the 'Haryana-marital-connection' of the villages in this part of the state began with a young man, Mohanan who was working in Hansi marrying a girl there. Mohanan who was not sure of his relatives at home approving the marriage did not maintain contacts with them for some time. His relatives were only too glad to receive the Haryana housewife.

And when an offer of marriage for his sister came from Hansi they had no hesitation in accepting it.

The bond became stronger and the chain of marriages began as the friends and relatives living in and around Ramanthali chose to accept offers from men belonging Haryana, obviously contributing a lot to strengthen the social and cultural fabric of the nation.

Helping women in distress

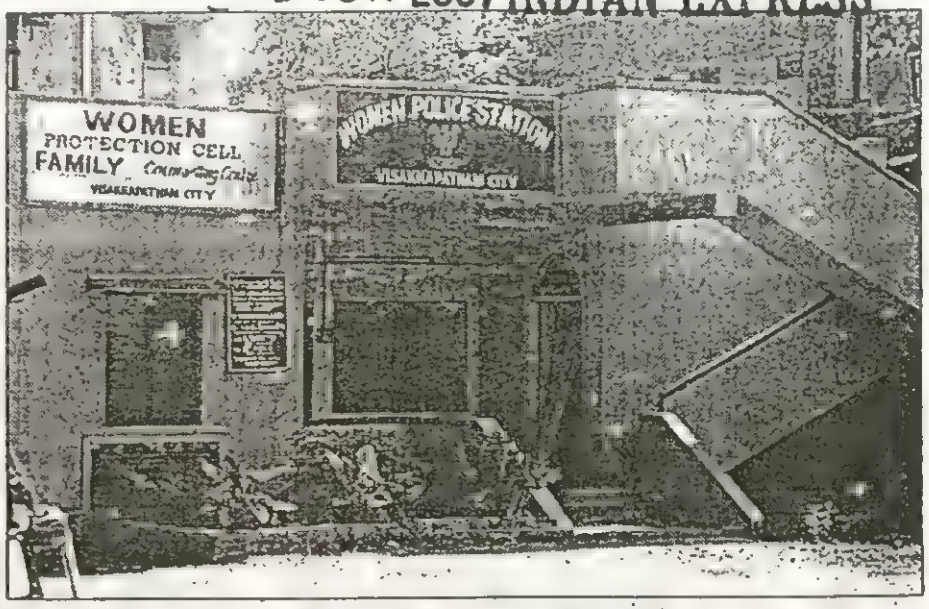
- 8 JUN 2007 INDIAN EXPRESS

BY PS DILEEP

Visakhapatnam, June 7: The City of Destiny has an exclusive police station to protect its women, at Suryabagh, a stone's throw from the City Police Commissionerate.

The Women's Police Station is headed by an elderly woman sub-inspector to provide solace to the woman in distress. This officer is assisted by a group of eight other woman constables.

To the misfortune of the woman in distress, these eight constables are on deputation, in rotation, from other PS in the city and are posted here for a month. The police constable after a stint here is better equipped to deal with women-related issues in the police station of her original posting. But, other than the SI, no other constable is aware of the case filed in the PS in the previous month.



The Women's Police Station at Suryabagh in Visakhapatnam.
-Expressphoto

Adding to the woes of the unfortunate woman in distress, the police station has a telephone that is not yet activated. What is worse, the PS does not even have an official vehicle forcing the SI and the constables to go around in auto-rickshaws or look for a good samaritan to offer them a ride.

Further, these eight constables are stretched by being frequently drafted for bandobust elsewhere, VIP duties, dharnas apart from their duty to accompany woman victims of dowry torture to hospitals. In this scenario it is not surprising that the constables are hardly aware of of any case reported in the police station the previous month or worse even the previous week.

Thankfully, the lone woman sub-inspector has been posted there permanently. But, she is due for retirement in a few months.

The woman police station is right under the II Town Police Station and takes up women-related offences like dowry, family disputes and cases of women ditched by unscrupulous men.

The police personnel first counsel the victim and if no compromise or rapproachment is possible then refer the case to the appropriate police station for action.

Rural dev./WW

Hindu

Job scheme a big draw among women

GULBARGA: The National Rural Employment Guarantee Scheme (NREGS), which provides employment for a minimum 100 days to the rural poor, has set a new benchmark in bringing about the much-talked-about gender sensitiveness in poverty alleviation programmes.

A study conducted at the national level on the participation of women in works taken up under the NREGS has revealed that more than 40 per cent of the workforce benefited by the programme is women and in some States such as Tamil Nadu, it as high as more than 80 per cent.

The Union Government, while framing the guidelines for the programme, had made it mandatory that at least one third of the workers employed for projects taken up with NREGS funds should be women.

A study conducted by the Gulbarga Zilla Panchayat, which monitors implementation of the programme in the district, reveals that 49 per cent of the workforce benefited by NREGS in the district is women. The percentage of women employed in projects taken up under the NREGS was slightly more than the total population of women in the district.

Chief Executive Officer of the zilla panchayat P.C. Jaffer told *The Hindu* here on Tuesday that one of the major reasons for women to get attracted to the projects taken up under the NREGS was the "women-friendly atmosphere cre ated at workplaces. There were with babysitters and facilities for informal education of young children and adult education programme for women during their spare time.

Another reason is the equality maintained in the payment of wages to both men and women in the projects taken up under the scheme.

The NREGS also provides for facilities such as safe drinkng water, shade for children to take rest, first-aid box and adequate material for emergency treatment of minor injuries and other health hazards. If the number of children below six who accompany workers at any site is five or more, one woman worker will be engaged to look after children and would be paid according to the wage rate.

Old women who are not able to do manual work are generally given the responsibility of taking care of children and paid for that.

And even during the lean season, women get good wages and that too equal amount as men. In the NREGS, the wages do not fluctuate according to the change in season.

It is an undisputed fact that the scheme has the potential to mobilise a large number of women

'Keep regular tabs on trafficking in women'

17 MAY 2007
DECCAN HERALD

DH News Service

BANGALORE: Taking note of the increase in trafficking in women and children in the State, Minister for Woman and Child Development Minister H K Kumaraswamy has written to the Chief Secretary to hold periodic meetings on the menace.

"I wrote to Mr P B Mahishi, also chairman of the State-level committee on prevention of such trafficking, requesting him to hold timely quarterly meetings and give us a status report," Mr Kumaraswamy told *Deccan Herald* on Wednesday.

Earlier, while briefing reporters in the City, he said these meetings were not being held periodically and he was "not satisfied" with the performance of the committees concerned.

"We have these committees at four levels; at the State, district, taluk and gram panchayat levels. These are formed by voluntary organisations and headed by different officers.

The district committee is headed by the deputy commissioner, the taluk committee by the executive officer and the gram panchayat one is headed by the GP president," said Mr Kumaraswamy.

"In fact, the GP and taluk meetings should be held once a month, instead of once in a quarter," he said. Incidents of trafficking are more in the border areas. "We are holding awareness programmes in GP areas and taluks," he added.

Allowances up

The government has increased the monthly allowance for physically challenged people and widows from Rs 200 to Rs 400 from April 1 this year. Last year the honourarium was enhanced from Rs 125 to 200, the chief minister informed.

Counselling centres

As many as 53 counselling centres in the State give destitute women free legal aid with the State Women's Commission's help.

"We plan to set up more of these centres," he added and also mentioned the Centre's Svadhar (self-employment) scheme and the Sandhya Suraksha Scheme in which the government helps families with an annual income below Rs 20,000.

On the Bhagyalakshmi scheme, Mr Kumaraswamy said: "We've identified 1,30,000 beneficiaries and will be distributing certificates to parents and female children identified under biometric parameters."

NGOs to help women hit by violence

THE TIMES OF INDIA, HYD. 30 JUN 2007

Govt Ropes In 72 NGOs Where Women Affected By Domestic Violence Can Lodge A Complaint

Jinka Nagaraju | TNN

Hyderabad: In a sweeping change intended to help victims of domestic violence, the state government has identified 72 NGOs in all 23 districts where complaints can be lodged. Moreover, all revenue divisional officers (RDO) will now act as protection officers under the Protection of Women from Domestic Violence Act, 2005.

After a complaint is lodged, the NGOs will forward it to the protection officers who will then be responsible for filing an FIR. Until now, the 23 project directors of the district women and child development agencies were the protection officers. By making the 90 RDOs in the state also as protection officers, the number of such officers has risen to 131.

A decision to this effect was taken last week and a government order to amend the GO (MS No 22) issued in November 2006 would be issued in the next couple of days, women and child welfare minister Neduramalli Rajyalakshmi told TOI.

"Andhra Pradesh is among the top five states in the country in terms of cases of domestic violence. This move is to make it easier for the victims as they can walk into the NGO's office, lodge their complaint and walk away. The NGO and the protection officers will take over from there," an official said. Andhra Pradesh

is said to be the first state to make this change.

According to sources, the move to widen the ambit of the state in tackling domestic violence was the result of months of persuasion by the women and child welfare department. The existing system was found to be not very effective in the implementation of the act which is primarily meant to provide protection to the wife or female live-in partner from violence at the hands of the husband or male live-in partner or his relatives. The Act also ensures that the first hearing would be held within three days and the case would be disposed of within 60 days.

"Domestic violence under the act includes actual abuse or the threat of abuse whether physical, sexual, verbal, emotional or economic. Harassment by way of unlawful dowry demands to the woman or her relatives would also be covered under this definition," the minister said.

"To make protection officer more accessible, their number has to be increased. And the system needs to be taken to the doorsteps of victims. So, an officer who has regular interface with people should be designated as the protection officer. For this, the RDO is the right person," the minister said.

The protection officer plays a crucial role. He alone files the domestic incident report (DIR) to be sent to the magistrate through service providers.

The state government has already identified the 72 NGOs which would act as service providers. These NGOs would act as a bridge between the victim and the protection officer, the minister said.

Bihar and Assam, with 39.6 per cent domestic violence cases, top the list followed by Orissa (38 per cent), Arunachal Pradesh (38.8 per cent) and Andhra Pradesh (35.2 per cent).

16

ASIDE

'Pollution affects women more'

New York: Latest research shows that air pollution affects women more than men. Researchers at Pennsylvania State University studied two groups of mice with pneumonia. One group was exposed to ozone, an air pollutant. The other group breathed filtered air. The exposure to ozone significantly decreased the likelihood of female mice surviving pneumonia as compared to males, reported science portal *Science A GoGo*.

The researchers also found that mice exposed to ozone died more often than mice that breathed filtered air. At ground level, ozone is a dangerous air pollutant that can cause irritation in the respiratory system, triggering shortness of breath, chest pain when inhaling deeply and wheezing and coughing.

Ozone is formed when sunlight acts on hydrocarbon pollutants spewed out into the air by vehicles and such industrial processes as painting, oil refining and manufacture of chemicals. Ozone is a major pollutant in American cities and more than 100 million people in the US live in areas with ozone levels higher than recommended air quality standards. India is also emerging as a hotspot for ozone pollution. *(IANS)*

SC to examine scope of 'demand for dowry'

HINDU
20 JUN 2007

If demand constitutes offence even if dropped later

J. Venkatesan

NEW DELHI: The Supreme Court on Monday decided to examine the scope of 'demand for dowry' under the Prohibition of Dowry Act, namely whether mere demand will constitute an offence even if the 'demand for dowry' was dropped subsequently.

In the instant case, the allegation against Manohar Lal was that in May 1986 he demanded a refrigerator and scooter from the bride as a condition for marriage. After the intervention of elders, the demand was dropped and he agreed to marry the girl. But the girl refused to marry him.

However, a complaint was filed under Section 4 of the Prohibition of Dowry Act against Manohar Lal, his father and brother. The trial court in December 1990 acquitted the three holding that the offence was not completed in view of the dropping of the demand and breakdown of the marriage.

However, by an order dated August 22, 2006, the Madhya Pradesh High Court, while upholding the acquittal of Manohar Lal's father and brother, convicted Manohar Lal to undergo six months imprisonment.

The present appeal is directed against this judgment.

Manohar Lal, meanwhile, got married to another person and had five children. Since he was arrested in pursuance of the judgment to undergo the sentence, he pleaded for grant of bail.A vacation Bench of Justice Arijit Pasayat and Justice P.P. Naolekar accepted his plea and ordered his release on bail and decided to examine the larger question raised by him, namely what would constitute an offence under Section 4 of the Act. In his appeal, Manohar Lal contended that he had not committed an offence as the demand for dowry was dropped and the marriage did not take place.

He also submitted that the High Court had failed to note that the alleged offence was not complete as he was prepared to marry the girl without dowry and only the girl refused to marry him.

He sought quashing of the impugned judgment and to release him on bail pending disposal of the appeal.

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Assisted Reproductive Technologies in India: Implications for Women

The growth and promotion of assisted reproductive technologies raise a number of issues with regard to their implications for women, primarily in terms of health and social pressures on them to conceive. Very often, women are not told the side-effects of the "treatment" and the social pressures operating upon them force repeated "trial and error". Much public awareness and debate are required on this important issue.

SAMA TEAM

The last two decades have been witness to a rapid increase in the number of technologies that assist reproduction, increasing the chances of conception and carrying a pregnancy to term. The term "Assisted Reproductive Technologies" (ARTs) encompasses various procedures, ranging from the relatively simple intrauterine insemination (IUI) to variants of in-vitro fertilisation and embryo transfer (IVF-ET), also referred to as IVF and more commonly known as "test-tube baby technology". Since the latter half of the 20th century, these technologies have developed at a rapid pace. They have also influenced the way in which society views pregnancy, reproduction and motherhood.

The first IVF baby in India may have been born just a few months after the birth in 1978 of Louise Brown, the world's first IVF baby, in the UK. Dr Subhas Mukherjee from Kolkata claimed credit for the second IVF baby in the world, Durga. However, his claim was considered to be inadequately documented and rejected.[1] India's first "scientifically documented" IVF baby was born on August 6, 1986. Harsha Chawla was born following the collaborative research efforts of the Indian Council of Medical Research's (ICMR) Institute for Research in Reproduction and the King Edward Memorial Hospital, a municipal hospital in Mumbai [ICMR 2005].

Research and promotion of ARTs was undertaken in India as a government initiative, but it soon fed into the private health sector and has since then flourished as a private enterprise. The public sector eventually discontinued the programme, but the ART industry in India has continued to expand steadily ever since its introduction. The potential market is estimated conservatively at Rs 25,000 crore [ibid]. Clinics offering ART procedures have also mushroomed all over the country, from Mumbai to Guwahati. According to an ICMR publication published in 2005, "There are an estimated 250 IVF clinics in India today" [ibid]. There will be many more such clinics in 2007.

Another indication of the growth of ARTs is the rise in membership of the Indian Society for Assisted Reproduction, which was set up in 1997. The web site of the society lists more than 600 members in 2007.[2] In addition, there are "infertility centres" in smaller towns and rural areas that work in coordination with referral ART centres located in tertiary healthcare institutes in cities.

From 2004 to 2006, Sama[3] conducted a qualitative study on the medical, social and ethical implications of ARTs on the lives of women in the Indian context. The study was conducted in three cities in India, Delhi, Mumbai and Hyderabad. The research was guided by the understanding that in a patriarchal society, the proliferation of ARTs can impose double burdens: the burden of a social system that restricts women's role to that of child bearing, and the burden created by what might be described as the medicalisation of everyday life.

This paper summarises some of the key findings of the study in terms of the responses of the providers of and those of women undergoing ART procedures. The paper is organised into six sections. In Section I, we briefly present the study methodology. Section II discusses the social pressure to give birth to a child. Section III discusses women's expectations of the child that they desire. Section IV discusses the nature of information and counselling (covering (a) informed consent, (b) information regarding egg retrieval, and (c) implantation and preservation; and information on the success rates of these techniques). Section V covers the side effects and complications of the drugs and procedures. Section VI focuses on the experiences and perceptions of this process as articulated by the women and describes (a) the impact on their lives and (b) why they feel adoption is not an option.

I
Methodology

The study was conducted in Delhi, Mumbai and Hyderabad. Twenty-three providers and 25 women who were either going through IUI and IVF or had been advised these procedures were interviewed using an open-ended interview technique. All the women were married. Supplementary interviews were conducted with ICMR officials and feminists and health activists from various social movements. A review was done of ICMR guidelines and existing literature on ARTs in various publications. Publicity materials of various clinics were also analysed.

Limitations

A few limitations were encountered during the course of the study. First, as the providers were selected from a list of registered ART clinics, the study does not include information on unregistered clinics. Second, although prior appointments were sought with providers, interviews were often interrupted. Third, it was difficult to hold interviews with women undergoing ART. Because of the stigma attached to infertility, such procedures are often undertaken in secrecy. Further, most women were interviewed in doctors' waiting rooms, an environment in which space and privacy were sometimes compromised. The presence of

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family members in some interviews also affected the free interaction between researchers and the women being interviewed.

II
The Social Pressure to Give Birth to a Child

Providers' Perspectives

All 23 providers agreed that couples – especially women – are under immense social pressure to have children. As one provider said, "Sometimes there is a lot of pressure on the woman to get pregnant in the first cycle itself. They go through a lot of psychological strain in such circumstances." Another said: "Women generally come with a lot of desperation because of the social ridicule to which they are subjected".

According to the providers the existence of this social pressure justified the rapid propagation of ARTs. They described the techniques as benefiting women. "These technologies provide solutions to those couples who are desperate to have their own children and are okay with (doing) everything to have a child", said another provider.

The providers stated that since women bear the disproportionate burden and social stigma of infertility and childlessness, they would certainly be willing to subject themselves to all forms of medical interventions in order to bear a child, regardless of the physical, psychological and economic costs that these may entail. By doing so, they reinforce the socially constructed ideal of womanhood which entails a linear progression from marriage to motherhood. This ideal excludes alternate forms of parenthood or voluntary childlessness.

Women's Perspectives

Women's narratives revealed the various subtle and obvious ways in which social pressure operated on them.

> I was living in a joint family and I had to shift away with my husband due to the constant pressure to conceive and give birth. My husband is very keen on having a child. I would have preferred not to have one as it will be very difficult to bring up the child in our advancing age, but he is very keen
> Though people did not say it directly, I could sense that I was being treated differently. I was not invited for auspicious functions. I could sense them watching us.
> There is no family pressure as such from anyone, but I myself feel the guilt for not being able to conceive even after six years of marriage. There is a feeling of emptiness ('khali khali lagna') from within, which is difficult to explain to others.

These responses highlight the various pressures, including shades of coercion, in the lives of married women who do not have children. These pressures are not only manifest in the behaviour of family and neighbours, they are also internalised so that women feel guilty for not being able to perform what is believed to be their natural role as mothers after marriage. The women describe the external social pressures they face: and they also describe personal desires or needs: "It was specifically my wish, or, rather, our wish, to have a baby of our own".

In such a situation it is difficult to distinguish between an individual woman's conscious wish to have a child and the socialisation which makes married women feel incomplete unless they have given birth to a child. Motherhood is viewed as the woman's destiny. Women often hold themselves responsible for their childlessness, even when it is the man who has a fertility problem. This social pressure on women to bear children has enabled the rapid growth of the ART industry in India.

III
Expectations of the Desired Child

Providers' Perspectives

According to providers, couples seeking donor insemination or ova look for certain social and physical characteristics in these donors. The most commonly specified characteristics were "fair", "young", "well-educated" and "from a good social and economic background". Also mentioned were: "intelligent", "healthy", "same religion and caste" and "good looks".

> There are demands for fair skin. In one instance, an Indian couple living in Kuwait, who are themselves dark skinned, wanted a fair skinned child. In another instance, a couple wanted sperm from a fair skinned man even though the husband's sperm was okay, as the husband was dark skinned.
> We assure patients that we are not getting sperms from 'rickshaw-wallahs' but from men of good families.

The overwhelming concern for the recipient couple as articulated by the providers was that the child should "look as if born from wedlock". On the one hand, the providers mentioned that certain characteristics were accorded high value in society and there was a demand for them. They also said that the couples were concerned about maintaining the integrity of the marriage followed by childbirth so that the outside world did not know that there had been an artificial process involved.

It was interesting that the providers' perceptions of essential characteristics usually echoed the couples' listing what was desired. As providers and couples seeking treatment are also part of the same society and imbibed the same values, they are likely to think that these characteristics are essential. Thus the ART industry promises to enable the reproduction of a baby with characteristics representing the appropriate caste, religion and class.

IV
Nature of Information and Counselling Provided

Providers' Perspectives

Twelve out of 23 providers responded to questions on the nature of information and counselling given to women undergoing these procedures. The information provided to the couples consisted largely about the procedures, success rates and costs. Information about possible side effects was either not provided or restricted to the more common and relatively milder complications. Besides, often the providers used a lot of medical terminology, which made it difficult for couples to understand them.

With regard to counselling one provider said, "Counselling is required only for couples in special cases where both the husband and wife have thalassaemia or when donor sperms or eggs will be used".

One of the providers stated that it was difficult to inform counsellors of the technicalities of the procedures involved. Another stated that the women feel satisfied only when counselled by the doctor.

Whenever people come for any medical treatment, it is good medical practice to give them complete information so that

they can make a truly informed choice. In infertility treatment this must include giving information on the treatment's side effects, complications and its efficacy, preparing couples for the possibility of repeated failures to conceive, and offering them alternatives to treatment and costs. Counselling, ideally by trained counsellors, is especially important in infertility treatment. Women seeking treatment are already under social surveillance, and experience tremendous stress; this stress is further magnified during the infertility treatment as they are under pressure for the procedure to succeed.

Women's Perspectives

Eight women said they had received some information, but only on the procedures and their success rates. One woman said that she was categorically told by the provider that there would be no side effects or complications. Three women were given an information brochure at the time of registration for the IVF procedure. Ten women said they did not know much about the treatment as the doctor was always too busy or they were hesitant to ask.

One woman's response summed up the general reluctance to ask questions: "I am going for an IUI today. She has prescribed me treatment but I have not been able to talk to her about anything. The problem with asking the doctor is also that they are so busy that they very often do not explain to you clearly whatever you want to know. If I ask, she might get angry, so I did not ask anything. Moreover, they often explain in English so you cannot comprehend half of it. What to do, I studied in a Hindi medium school that is common in Haryana."

Though some women expressed their dissatisfaction with the lack of information, others felt that the doctor might have told them more – if they had asked. But they hesitated to ask the doctor, for fear of offending him/her.

Women often expressed the belief that it was their own responsibility to ask about such information and not the doctor's duty to provide it to them voluntarily. Thus, in most cases they did not blame their doctor for not giving the information; they felt that it was their lack of experience or knowledge which made them refrain from asking questions.

Informed Consent

Providers' Perspective

Nine of the 23 providers said that they used informed consent forms. Three of them stated that their informed consent forms were reproduced from the ICMR ethical guidelines on ARTs. Only one provider used informed consent forms in English as well as in the local language.

Two providers claimed that all side effects are mentioned to the women clearly. "We explain everything to them; sometimes they sign the form without even reading it." Three providers stated that informed consent forms are basically disclaimers to ensure

that the clinic would not be held responsible in case of any complications or problems.

Women's Perspective

Seven women reported signing consent forms and four said that their husbands had signed on their behalf. Fourteen did not sign any informed consent forms. Regarding the content of the informed consent forms, only one of the 25 women reported that she had read the form and that it contained information on side effects and success rates. Another woman who signed the form said, "The informed consent form was in English. As we don't understand English, the doctor read out the form in Telugu. He said that there may be some side effects and also that the success rate was low."

Not all the women in this group gave their informed consent before undergoing ART procedures. Sometimes the informed consent forms were signed by the woman's husband. All the necessary information needed to make an informed choice was not usually disclosed. Moreover, the forms contained a lot of medical terminology which made it difficult for a layperson to understand them.

Information Regarding Egg Retrieval and Implantation and Preservation

Providers' Perspective

Through conversations with the providers it became clear that there was a wide range in the number of eggs retrieved – from five to 16 eggs. The providers stated that the number removed depended on individual women. In one case, a provider claimed to have retrieved 35 eggs. Regarding the maximum number of embryos implanted in one IVF cycle, eight providers responded saying that it varied between two to five, with three being the most common.

Women's Perception

Only three women of 25 claimed to have had clear information on the number of eggs retrieved, implanted and the status of the leftover embryos. One woman knew that embryos were cryo-preserved but had no idea of the number of eggs retrieved or implanted. The remaining 21 women had no clue of how many eggs had been retrieved during their treatment. "We don't have any idea of how many eggs were retrieved or how many were implanted. Only the doctor knows that." Retrieving large numbers of eggs (and certainly in the case of retrieval of 35 eggs) can involve hyper stimulation of the ovaries through hormonal drugs. This can result in serious medical complications for women.

Success of These Techniques

As Quoted by the Providers

Providers asked about the success rate of their procedures often quoted the implantation rate or the chemical pregnancy rate (pregnancies confirmed by blood and urine tests but in which the embryo may not be formed or develop beyond the earliest stage) as the success rate, rather than the live births rate or the "take home baby" rate. According to one provider, "The success rate of IVF can be 60 per cent if the reason for going for IVF is only male factor infertility. Moreover, if the women are young, the success rate can go up to 70 per cent."

Twenty-one providers commented on the success rate of IVF. Among these, 17 gave the implantation rate as the success rate. This also varied widely and ranged between 10 per cent and 50 per cent. Only three quoted the take home baby rate as the success rate directly, without being asked for it. The take home baby rate ranged from 20 per cent to 50 per cent. One provider did not mention any specific success rate for IVF, but said that 90 per cent women get pregnant in three cycles.

A few providers justified quoting the implantation rate rather than the live birth rate by saying that women were referred to them for infertility treatment and went back to their gynaecologists once they conceived. Hence it was not possible to keep track of the take home baby rate. However, quoting the implantation rate as the success rate is an attempt to mask the actual success rate, i e, the live birth per IUI/IVF cycle. The providers use terms like the implantation rate and the chemical pregnancy rate synonymously with the live birth rate to manipulate definitions of pregnancy to their own advantage, using them to promote ARTs in general and their provision of them in particular.

It is also difficult to have a clear idea of the success rates of these technologies in the Indian context, given the absence of a central registry for ART clinics. This problem is compounded by the use of varying definitions for success rates.

Success of the Techniques as Perceived by the Women

One of the most striking findings in this study was the extent to which women were willing to endure the treatments even when they did not work. Thirteen of the 25 women went through IUI. Five women conceived, one in the first cycle, one in the second cycle, two in their third cycle and one in the fifth cycle. Three women reported having undergone three cycles; four women had undergone six cycles. One woman had gone through eight cycles and not one of these had resulted even in an implantation of an embryo. The remaining 12 women had undergone more than one procedure. One woman said, "I had five IUIs followed by two IVFs, all of which failed". Among these 12 women, only three had become pregnant. As one woman said, "Before I became pregnant, I underwent five IUIs, one IVF and one IVF-ICSI".

It is extremely disconcerting that so many women, even in our small study sample, repeatedly put themselves through procedures in order to bear a child. This is how couples enter the slippery slope of reproductive technology. Women considering assisted reproduction should be given a realistic picture of their chances. Selectively quoting success rates presents a rosier picture of ARTs than may actually be the case. It also betrays the faith that women put in their healthcare providers.

V
Side Effects and Complications of the Drugs and Procedures

Providers' Perceptions

Nineteen of the 23 providers spoke about the side effects and complications of the drugs and procedures. In general, they said that there were no major health risks. It was only after probing

that they mentioned risks such as ovarian hyperstimulation syndrome and side effects such as weight gain but tried to minimise them by presenting it in the form of a risk-benefit analysis.

> If the benefits outweigh the risks then it is worth taking the risks. There are no major side effects of the drugs used for the infertility treatment. Side effects are nothing compared to the lifelong problem a woman faces due to infertility.

"There are no side effects of these techniques; it is basically assisting the natural process," said one provider. However, on probing, he added, "There are chances of multiple births, twins mainly, but we don't consider this as an adverse effect".

In an attempt to justify the use of potentially risky techniques, side effects are portrayed as minor, negligible in comparison to the necessity and desirability of having a child. Providers also attempted to individualise side effects: "Drugs are used to stimulate the process, but side effects vary from person to person. For example, if I have aspirin it may not react, but for some other person it might."

The drugs and medical procedures used in ARTs to stimulate the production of eggs, or for oocyte retrieval, foetal reduction and embryo implantation, are associated with a wide variety of complications. Women on these medications can experience any of the following dizziness, fatigue, mood changes including manic depression, and serious allergic drug reactions. Weight gain and oedema are other side effects. The drugs are known to increase the chances of ovarian cancer, and can also cause the life-threatening ovarian hyper-stimulation syndrome. Ectopic pregnancies that are life threatening to the mother and multiple pregnancies that are high risk to the foetuses are known to occur more frequently in women undergoing fertility treatment. Procedures such as egg retrieval carry with them the risk of uterine perforation.

A recent press report from Kolkata records the transmission of HIV through semen donation [Dhar 2003]. This can happen when donor sperm is not screened properly. Clinics often overlook or underplay such health risks while providing information to the women undergoing these treatments.

"(A) high possibility of miscarriages takes place in cases where women do not take proper care of themselves after conception". This provider attempted to place the burden of risks and complications of the procedures on the women who "willingly" undergo the procedure to have a child.

Women's Experiences

Three women categorically stated that they "did not experience any discomfort" from the procedures, or that "there were no side effects of the drugs". "I have not felt medical complications in the procedure. The only thing is that I am getting fat and there is heaviness in the chest."

Ten women mentioned what were clearly side effects of the drugs. Primary among the side effects were weight gain, fatigue, increased micturation, mood swings, giddiness, skin rashes, fevers, hot flashes and a feeling of bloatedness. One woman stated that she reacted to the drug metformin. "I had a bloated stomach and pain in the abdomen". Another woman stated: "There are definitely side effects of the various medicines that I have been taking. I have gained weight; there is a constant feeling of giddiness also. Intake of these medicines sometimes results in a sudden rise in body temperature, and I feel very hot." Two women described the pain of the laparoscopy..."*uo durbin laga ke* (the way the laparoscope lens was inserted). That was painful..."

However, it seemed that most women had accepted the pain and side effects as something minor and integral to the "treatment". Their providers had offered them this risk-benefit analysis and asserted that all this had to be endured in order to get the child that they desired.

VI
Experiences and Perceptions Articulated by the Women

Seventeen women described their experiences and perceptions of the treatment. Eleven of them stated that the treatment, above all, had been "mentally exhausting", "tiring", and "frustrating". One woman said: "I am generally a person with a fighting spirit but I have gone through moments of utter desperation and depression and I feel that the world has come to a halt. Once the IVF cycle fails, you feel utterly dejected. You feel frustrated."

Another woman described her experience of the procedure:

> The last time I was here, the doctor said I had to go for Oral Glucose Tolerance (OGT) test, some kind of an insulin/sugar test. If the report was positive, then I was to take the drug Metformin. When I called up to check the result of the test, the doctor got angry and asked me to come and visit her and not to inquire over the phone. She also told me to start the medicine. If they can start the medicine without the report, then what was the need to ask me to go in for the test? It's just a waste of Rs 2,000. What's it to them?

Another woman said:

> Every month you hope that you will skip your menstruation and conceive. It is a feeling of complete helplessness when you have your menstruation, you can't even explain it. You have only 12 chances of conceiving in a year, and suddenly this seems such a small number. It is very important to have a positive mental attitude; otherwise it becomes very difficult to remain stable. Patients like us who have been undergoing treatment for quite some time now and have been going from one doctor to the next, understand quite clearly that this is a trial and error science.

Six women expressed their dissatisfaction with the providers or blamed their own luck in not being able to conceive. The rest refused to talk about the experience at all. One woman questioned the science itself: "They say science has progressed but I don't understand, with my limited knowledge, how it has progressed. Even during the Mahabharata, Pandu, Dhritrashtra and Vidur were all sons of Vyas Muni – isn't it so? Even Pandu's sons were born of different gods."

Thus, women's perceptions ranged from looking at ARTs as a "gamble", "a trial and error science", to viewing its success as dependent on their individual luck and god's will. Thus they use both medical and socio-cultural languages to understand the process and also to gain a new understanding of the body and the process of reproduction. Questions about the "newness" of science by drawing parallels with mythology coexist with an unquestioned hope that scientific intervention will create a miracle.

Impact on Life

Women's Experiences

Women who were self-employed or working said that "frequent visits to the clinic", "waiting for long hours" and "travelling long distances" affected their work and general routine. "It affects

my work pattern and my business suffers as I have to come to the doctor very frequently".

> During that phase (of going through IVF), I would come in the morning on an empty stomach for some tests. The report would be available only after 4 p m I would sit here the entire day, bring my 'roti' and eat here. What other option do we have?
> I have come all the way from Kanpur. We visited a few doctors in Kanpur and then our relatives in Delhi told us about this doctor. We have been with her for eight months, but have had no success yet. We have a 10 year old son but he is not a normal child. It is difficult to come all the way from Kanpur, and to leave our son with relatives is even more difficult.

One woman said that the treatment had affected not only her work but also her sexual life: "Let's accept it that the process is very frustrating. You don't have sex because you want to. But you have sex because you have to. Once I conceive, maybe I won't 'do it' at all."

Four women said that the fertility treatment had not affected their work or general routine but they felt that this was so because they were not working; the routine of their husbands was affected as they had to accompany them: "I am not working, so I can adjust and come over whenever the doctor calls me. However, it disrupts the routine of my husband as he is an aspiring software engineer."

Many trends emerge in these narratives. For some, going through this process has affected their general routine, work or sexual life. Those who were not professionally engaged felt that their work and general routine could be compromised vis-à-vis their husbands'. They did not perceive their household work as important enough compared to their husbands'. It was also felt that going through this process had affected their sexual life which had become a mechanical way of procreation under the medical "gaze". However, women who had been going through this process for a long period felt that the process had become a part and parcel of their daily routine; it had become the axis on which their lives now revolved. Since motherhood is central to the social construction of womanhood, one can understand why women who fail to bear a child often subject themselves again and again to the long drawn and often perilous procedures of ARTs.

Why Adoption Is Not an Option

Providers' Perceptions

On the question of adoption as an option, only 15 providers responded. Among these 15, eight providers were of the view that adoption is the last resort, to be considered only when all other treatment options fail. However, three other providers felt that people who were open to adoption would not come in for the treatment at all and that it cannot be imposed on couples as a viable option. Two other providers felt that some people go in for adoption if they require donors. The remaining two providers said that they only recommended it to couples who, in their view, could not afford expensive ART procedures.

Women's Perceptions

Nineteen women shared their thoughts on adoption as an alternative. Eight women among these did not really consider it as an option because "I want my own child" and "there was always a difference between your child and someone's child whom you bring up as your own".

One woman shared her dilemmas about adopting a child: "We live in a joint family and have a huge business, and so, I don't want the child to grow up where everybody alienates him/her because he/she does not carry our gene pool. Moreover, the process of adoption is so difficult. How would you be sure that the baby does not have major diseases? I am not saying that there won't be people who would willingly adopt a mentally handicapped child. But, I might not be in a position to do so – so how would I get assured that I am adopting a child who does not have thalassaemia. These factors do come in."

Two women said that they had not thought about adoption because "the doctor never told us that we don't have hope of conceiving. He said I would conceive through IVF." Six women said that they had thought of adopting a child at some point. Three said that though they themselves were open to the idea, they had faced resistance from their husbands and families.

Most of the women wanted to give birth to a biologically related child and hoped that this might be possible with ARTs – a hope that had been given to them by their doctors. While for some women adoption was the last resort, for others it was not an option at all. Even those who had thought about it were still negotiating their beliefs and societal notions of what it means to have a child. What was also important was how the issue of adoption gets closely linked to issues of fertility and infertility.

VII
Conclusion

The findings of the study highlight a number of issues surrounding ARTs: the social implications of childlessness and the importance of motherhood; the fragmented nature of the information imparted to the women on the treatment's success rates, side effects, etc. Alternate possibilities of voluntary childlessness and adoption never find a place in this market driven ideology of assisted reproduction. As a result, women keep trying to have a child through these techniques. The technologies also provide the scope for having specific traits in the child, which are desired and valued in society.

The fundamental aim of our study was to bring these issues in the arena of public debate, thereby raising awareness about ARTs and their numerous implications and potential drawbacks. EPW

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Notes

1 Dr Mukherjee committed suicide in 1981, reportedly because of the medical community's criticism of his claim.

2 Website, Indian Society for Assisted Reproduction, 'http://www.isarindia.net/accessed in September 2006.

3 Sama-Resource Group for Women and Health is a Delhi based women's group working on health from a larger perspective that links women's well-being with issues not only of health, but also those integrated with livelihood, violence and all other issues that affect people's lives, especially those of women. Sama works closely with tribal, dalit and other marginalised communities and has made interventions through various activities like community-based training, action research, advocacy and material development. Sama would like to thank Sandhya Srinivasan for editing the paper.

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Factors Influencing the Use of Prenatal Diagnostic Techniques and the Sex Ratio at Birth in India

Data from the 2001 Census reveal that the sex ratio at birth may have increased by 6 percentage points in India since 1985, and in some parts by 20 percentage points. Data from the National Family Health Survey of 1998-99 show that while the use of prenatal diagnostic techniques has become fairly common only a minority misuses them for aborting female foetuses. The effect of PNDT use on the sex ratio at birth is found to be contingent on whether women are in the male-selection situation (i e, with at least one previous birth but have had no sons) or not. While income and education are found to increase the use of PNDT, their misuse is governed more by cultural factors and the sex composition of children already born.

P N Mari Bhat, A J Francis Zavier

The Indian subcontinent is one of the few regions in the world where there are more males than females in the population. Before the landmark study of Pravin Visaria on the sex ratio of India's population, several hypotheses were in circulation to account for this unusual occurrence. Visaria (1971) persuasively argued that excess female mortality is the main reason for this anomaly and laid at rest other competing explanations. But India's sex ratio (males per females) has shown a more or less steady increase since 1901, even though the data from the sample registration system suggest narrowing of the sex differentials in mortality in recent years. The latest census in 2001 has recorded a significant increase in the sex ratio of children age 0-6 while registering a decline in the overall male-female ratio from the previous census in 1991. Many attribute the increase in the child sex ratio to a possible rise in the sex ratio at birth (SRB) owing to the increasing incidence of sex-selective abortion in regions where son preference remains strong [e g, Das Gupta and Bhat 1997; Sudha and Rajan 1999; Arnold, Kishor and Roy 2002]. But it has also been pointed out that there could be other factors at work such as changing pattern of age misstatements by sex, and increase in the SRB because of improvements in health status and midwifery practices and from the decline in the proportion of higher-order births [Bhat 2002].

Although it is well established that under normal circumstances, more males than females are born among all human populations, the SRB cannot be regarded as a universal constant. But often the observed variations are due to smallness of the sample of births from which the ratio is calculated or incomplete coverage of births of particular sex. From an analysis of data for countries with relatively complete registration, Visaria (1971) concluded that the SRB varies generally between 103 and 106. There is also some evidence of secular trends in the SRB, predating the invention of modern technologies of sex selection. Some western countries with reliable and long-standing registration data, such as Sweden and England, have recorded increase in the SRB of the order of 2-3 per cent over a period of one or two centuries [Klasen 1994]. The data for British India compiled by Visaria (1971) from the civil registration system showed that male-female ratio at birth increased from 107 in 1901-10 to 110 in 1940-46. The decline was seen in all the major provinces of British India except Bombay and Assam. However, Visaria was of the view that the observed trend was a spurious result of deterioration in the completeness of the registration system in British India. But fairly complete vital registration data available for four districts of Maharashtra (known as Berar during British rule) also showed a similar upward trend in the SRB during the first half of the 20th century [Dyson 1989; Bhat 2002].

The spatial and temporal variations in the SRB arise from social, demographic and biological factors affecting the SRB. Literature on the issue is replete with many speculations regarding the factors affecting the SRB. While a large number of factors are considered to be important, there are only a few studies that analysed the relationship in the multivariate context [Teitelbaum 1972; Chahnazarian 1988]. One of the main reasons for the paucity of such studies is because, national vital statistic systems, which provide data on large sample of births required for such an analysis have information only for limited set of associated factors. The data from India's National Family Health Surveys (NFHS) provide an opportunity to analyse the effect of a larger set of factors from a fairly sizeable sample of births using multivariate techniques. Also, as the second round of the survey (NFHS-2) had collected data on the use of ultrasound and amniocentesis during pregnancies of live births born during the three-year period preceding the survey, they additionally make it possible to analyse how socio-economic and demographic factors affect the SRB through the "misuse" of such techniques. Although some attempts have already been made to analyse this data set for this purpose [Arnold, Kishor and Roy 2002; Retherford and Roy 2003], its potential is yet to be fully exploited. An attempt in this direction is made in this paper. We also

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take advantage of recently released data from the 2001 Census on fertility and age-sex distribution of the population in single years to study the influence of some key factors on the SRB in India.

Evidence from Census of 2001

Information on the sex ratio of children of age 0-six years was one of the first data to be released from the 2001 Census. It caused widespread anguish as it showed significant fall in the proportion of females in this age group, indicating dramatic increase in the incidence of pre-birth elimination of females [Registrar General, India 2003]. But data on child sex ratios are also affected by sex differentials in child mortality, under-enumeration and age misreporting [Bhat 2002]. Recently, census data on population by single years of age have been released. This information can provide further clues to the nature of changes in the child sex ratio and its causes. In analysing this information, before computing sex ratios, we applied a three-point moving average formula to smooth the single year age data. In Figure 1, for all-India and the state of Punjab, we have plotted the difference in the sex ratio (males per 100 females) at the same single-year of age between 1991 and 1981, and between 2001 and 1981. However, the graph shows instead of age, the year of birth of children implied by their reported age in the census. For both Punjab and India, the increase in the sex ratio is more pronounced for more recently born children (i e, at younger ages). As per the 1991 Census data, the sex ratio steadily increased between 1985 and 1990 by 3 percentage points for India as a whole, and by 9 percentage points for Punjab. As per the 2001 Census data, the sex ratio steadily increased between 1995 and 2000 by another 3 percentage points at the all-India level, and by another 11 percentage points in Punjab.

The pattern of change observed in the census data discounts the possibility of this change arising from a rise in excess female child mortality in recent times. If it were the cause, owing to the cumulated impact of the mortality differential, sex ratios at ages three-four years would have shown greater change than at ages one-two years. The systematic age (or time) pattern in the sex ratio increase raises doubts whether it could be explained by more accurate reporting of children's age. However, the role of age misreporting in distorting the trend in sex ratios cannot be completely ruled out since for the overlapping period of 1988-90, the rise in the sex ratios indicated by the 1991 and 2001 Census are not identical – while the former census indicates significant increase, the latter indicates no change or a even a decline (in comparison to the sex ratios of 1981 Census at corresponding ages).

To a large extent, the systematic rise in the sex ratio in the years preceding the census must have been due to the rising trend in the SRB. If it were the only cause, the implication is that between 1985 and 2000 the sex ratio at birth increased by 6

Table 1: Sex Ratio for the Age Group 0-2 Years in 1981, 1991 and 2001 Censuses

State	Sex Ratio, 0-2 Age Group			Change
	1981	1991	2001	1981-01
All-India	102.7	105.4	108.3	5.6*
North-west				
Jammu and Kashmir	104.2	na	109.0	4.8*
Himachal Pradesh	103.2	107.1	113.9	10.7*
Punjab	107.3	116.2	127.2	20.0*
Haryana	107.8	114.7	124.2	16.3*
Delhi	106.1	109.1	116.5	10.4*
North-central				
Rajasthan	103.0	108.1	111.4	8.4*
Uttar Pradesh	103.1	105.9	108.8	5.6*
Bihar	100.5	103.5	105.3	4.8*
Madhya Pradesh	101.5	103.6	106.1	4.6*
East				
Assam	na	103.4	103.8	0.4
North-east@	101.6	101.8	103.3	1.7
West Bengal	101.9	103.4	104.3	2.5
Orissa	101.0	103.3	105.8	4.8
West				
Gujarat	104.6	107.4	114.3	9.7*
Maharashtra	105.1	107.0	111.3	6.2*
Goa	104.5	103.7	108.1	3.6
South				
Andhra Pradesh	100.5	102.5	103.6	3.2
Karnataka	102.3	104.4	106.0	3.7*
Kerala	102.7	104.8	104.1	1.4
Tamil Nadu	102.9	105.2	106.0	3.1

Notes: * Linear change with age statistically significant.
@ Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura.
Source: Census of India, 1981, 1991 and 2001.

Table 2: Child Sex Ratio and Sex Ratio at Birth by Selected Background Characteristics, All-India, 2001 Census

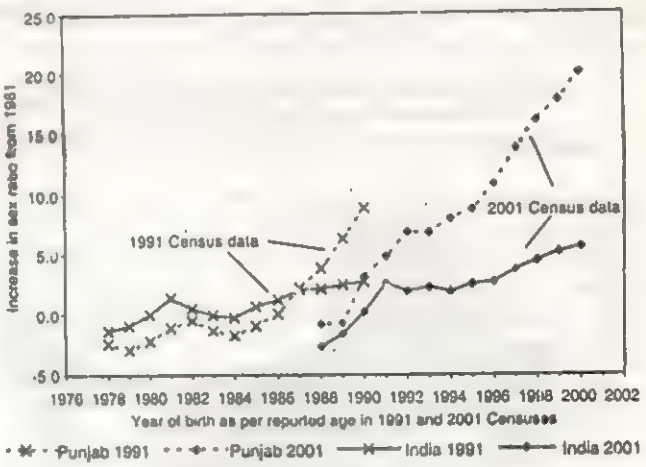
Background Characteristics	Sex Ratio of Children of Age 0-6 Years	Sex Ratio at Birth: Births during the Preceding Year	Children Ever-born to Women Aged 20-34
All	107.8	110.4	106.7
Residence			
Rural	107.1	110.4	106.3
Urban	110.3	110.6	108.3
Religion			
Hindu	106.2	110.9	106.9
Muslim	105.3	107.4	105.3
Christian	103.7	103.8	103.0
Sikh	127.3	129.8	119.1
Buddhist	106.2	108.4	105.2
Jain	115.0	118.0	110.5
Other religious communities	102.5	106.5	102.3
Caste/Tribe			
Scheduled tribe	102.8	106.4	103.1
Scheduled caste	106.6	108.6	105.8
Others	108.8	111.5	107.4
Mother's age			
< 15	na	105.9	na
15-19	na	108.2	na
20-24	na	111.4	na
25-29	na	113.2	na
30-34	na	112.1	na
35-39	na	109.1	na
40-44	na	103.7	na
45-49	na	99.7	na
50+	na	75.7	na
Mother's educational level			
Illiterate	na	108.7	106.0
Literate but below primary	na	110.0	106.3
Primary but below middle	na	111.8	107.1
Middle but below matric or secondary	na	113.0	107.5
Matric or secondary but below graduate	na	115.3	109.4
Graduate and above	na	114.1	109.7
Total births/children (in thousands)	1,63,820	19,887	2,37,822

na - not available/applicable.
Source: Census of India, 2001.

percentage points at the all-India level, and by as much as 20 percentage points in Punjab. Table 1 shows the sex ratio for the age group 0-two years from the censuses of 1981, 1991 and 2001 for the states of India. Between 1981 and 2001 the sex ratio in this age group has increased in all the states. The increase is particularly large in states in north and western India. To check whether the 2001 Census implies a steady increase in the sex ratio in the years before the census, the single-year sex ratios for the period 1995-2000 (i e, for ages one to five) were regressed on time (or age). In all states in north and western India, except in Goa, the observed rise in the sex ratio during this period was statistically significant. But in the states in south and eastern parts of India, except in Karnataka, the recorded rise during this period was not statistically significant. Thus in at least north and western parts of India there have been sharp increases in the SRB.

The data on fertility from the 2001 Census provide more direct information on the SRB. They also make it possible to study factors influencing the SRB in greater detail as they have been cross-tabulated by more variables than the child sex ratios. Two types of data on fertility were colleted in the census of 2001: (i) live births during the one-year period preceding the census for all currently married women (i e, current fertility) and (ii) number of children ever born for all ever-married women (i e, lifetime fertility). In both cases, data have been collected on the sex of the child. These data have been tabulated by mother's age, religion, and educational level for rural and urban areas of all states. Table 2 shows the SRB by mother's background characteristics for the entire country.

Figure 1: Increase in Child Sex Ratios between 1981 and 1991 and between 1981 and 2001 by Single Year of Age, for India and Punjab



Source: Census of India, 1981, 1991 and 2001.

In all, nearly 20 million live births were reported during the year preceding the census. They imply a SRB of 110 males for 100 females. This sex ratio is higher than the sex ratio of 108 for children of age 0-six years at the time of the census. As child mortality is higher for girls than boys in India, the child sex ratio should have been higher than the SRB. The discrepancy could be indicating either a rise in the SRB during the years preceding the census, or underreporting of female births that occurred

Table 3: Sex Ratio at Birth by Residence and Mother's Educational Level, 2001 Census

Region and State	From Data on Births during the Year Preceding the Census					From Data on Children-ever Born to Women Age 20-34 Years				
	All Areas	Rural	Urban	Mother's Education		All Areas	Rural	Urban	Mother's Education	
				Illiterate	Matriculation or Higher				Illiterate	Matriculation or Higher
All-India	110	110	111	109	115	107	106	108	106	109
North-west										
Jammu and Kashmir	105	105	103	102	114	109	108	113	107	116
Himachal Pradesh	118	119	117	112	127	109	109	114	105	115
Punjab	127	127	126	118	139	118	118	119	114	125
Haryana	127	127	127	120	141	116	115	117	113	122
Delhi	117	121	117	110	125	112	114	112	109	116
North-central										
Rajasthan	116	115	119	113	124	109	108	111	108	113
Uttaranchal	117	117	117	114	124	107	106	110	105	112
Uttar Pradesh	111	111	109	110	119	107	107	110	107	111
Bihar	109	109	109	107	118	107	107	109	107	110
Jharkhand	110	110	114	109	116	104	104	107	104	107
Chhattisgarh	108	107	109	107	112	102	102	104	101	107
Madhya Pradesh	111	110	113	109	116	106	106	109	105	109
East										
Assam	106	106	102	105	106	104	104	106	104	104
North-east	103	103	101	102	101	102	103	102	103	103
West Bengal	103	103	99	102	102	104	104	105	104	104
Orissa	108	108	105	106	111	104	103	105	103	105
West										
Gujarat	120	118	125	114	134	112	110	115	109	119
Maharashtra	114	115	112	110	118	108	107	108	108	111
Goa	109	106	112	105	109	105	104	106	105	105
South										
Andhra Pradesh	105	106	103	105	106	104	104	104	104	104
Karnataka	103	103	104	102	104	105	105	105	105	105
Kerala	103	103	104	102	104	104	104	104	105	104
Tamil Nadu	107	109	104	108	106	105	105	104	106	104

Source: Census of India, 2001.

Figure 2: District-wise Sex Ratio at Birth among Children Ever Born to Women Aged 20-34 Years in 2001

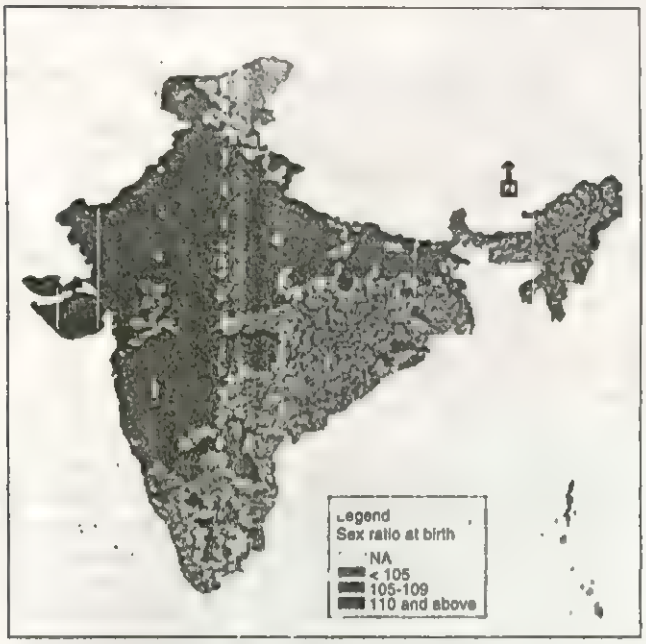
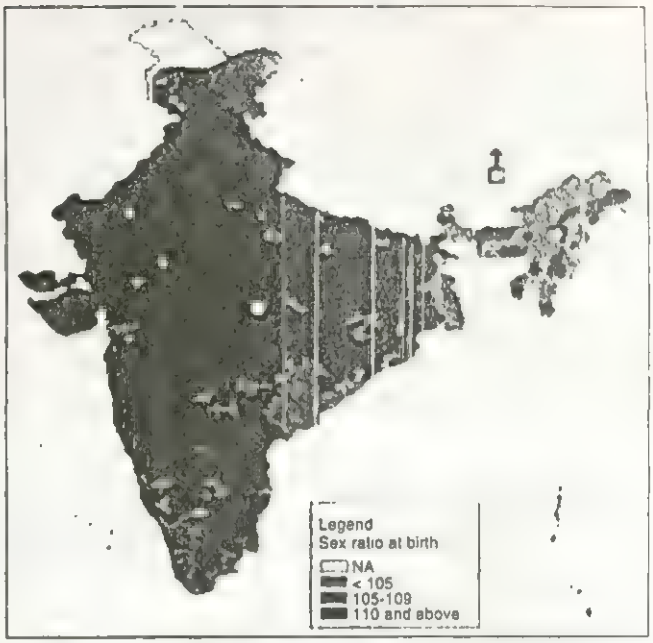


Figure 3: District-wise Sex Ratio at Birth among Those Born during the Year Preceding 2001 Census



during the year preceding the census, or greater exaggeration of age for boys than girls in the census. The foregoing analysis of child sex ratios by single years of age strongly supports the first possibility.

The census data on children ever born show a steady rise in the SRB from 105 for women aged 15-19 to 113 for women aged 45-49 in 2001. This is probably due to the failure of older women to report female children who died many years ago or who are married and living with their husbands. To minimise the effect of such recall errors, Table 2 shows the SRB implied by the data on children ever born to women aged 20-34 years. In all, these women reported 238 million live births in their lifetime, with a SRB of 107. As these children were born on average five-10 years before the survey, they would be indicating a SRB lower than that for the year preceding the census if the SRB has been rising.

Interestingly, the data on births for the year preceding the census shows negligible rural-urban difference in the SRB, whereas data on children ever born shows, as expected, higher SRB in urban areas (108) than in rural areas (106). This may be indicating either that the rural-urban difference has disappeared in more recent years or that rural women have under-reported more female births that occurred during the last year than urban women. But the analysis of child sex ratios by single years of age did not indicate a convergence of sex ratios in rural and urban areas. For example, the child sex ratio for the age group 0-two years in 2001 was 111 in urban areas compared with 108 in rural areas. The analysis of the increase in child sex ratios since 1981 by single-years of age (similar to the one shown in Figure 1) showed that the SRB may have increased by 8 percentage points in urban areas compared with 5 percentage points in rural areas. It is therefore likely that in the census data on current fertility, the under-reporting of female births was more in rural areas than in urban areas.

However, data on current as well as lifetime fertility show that the SRB increases with the mother's educational level. The data on births for the year preceding the census show that the SRB increases from 109 for illiterate women to 115 for women who have completed matriculation. But those graduated from college have reported a SRB of 114. The data on children ever born show that the SRB increases steadily from 106 for illiterate women to 110 for women with a college degree.

Religion is another variable that shows a systematic relationship with the SRB. As per both types of data, the SRB is 103-104 for Christians, indicating little practice of sex-selective abortions. But the SRB is much higher than the normal range among Sikhs and Jains. As per the data on births during last year, it is 129 for Sikhs and 118 for Jains while as per the data on children ever born it is, respectively, 119 and 111. Hindus, the main community, have a SRB of 111 and 107, as per the two types of data. The data on scheduled tribes indicate no evidence of sex-selective abortions (sex ratio being 106 and 103, respectively). As per both types of data, the SRB for scheduled castes is 2 percentage points higher than that for scheduled tribes.

The data on births for the year preceding the census have been tabulated by the mother's age at the time of the census. As in this case the time lapsed since the birth is less than a year, the mother's age is essentially her age at the time of birth. The SRB calculated from these data shows a curvilinear relationship with her age. It increases from 106 for mothers aged less than 15 to 113 for mothers aged 20-29 and then decreases steadily to 75 for women aged more than 50 years. Many studies have reported such a curvilinear relationship [e g, James 1987; Chahnazarian 1988], which could be due to the relationship of maternal age with stillbirth rate and coital frequency. Such a pattern may be accentuated in a situation where sex-selective

practised because this practice peaks around the third

... shows the SRB computed from the two types of ... fertility data for the states of India. None of the states ... the south and eastern parts of India show any evidence of ... sex-selective abortions, as the computed SRB from both types of data are well within the normal range. In these states, births born even to women who completed matriculation show no evidence of female foticide. But there is a strong evidence of sex-selective abortions in north and western parts of the country, especially in the states of Punjab, Haryana and Gujarat. For the year preceding the survey, the SRB is 127 for Punjab and Haryana and 120 for Gujarat. The SRB computed from the data on children ever born to women aged 20-34 is 118 for Punjab, 116 for Haryana and 112 for Gujarat. In all the states of north and western India (except Goa), the SRB reported by women who had passed matriculation is higher than 106. In Punjab and Haryana, the SRB for this group of women is as high as 139-141 as per the data on births during last year, and 122-125 as per the data on children ever born.

The existence of strong regional pattern in the SRB becomes even more evident when it is mapped for the districts of India. Figure 2 shows such a map drawn using the data on lifetime births for women aged 20-34, while Figure 3 shows the map drawn using the data on births during the year before the census. As the former map is based on more number of births per district, it may be more reliable than the latter but refers to an earlier period than the map in Figure 3. In Figure 2, a line drawn diagonally separating south and eastern India from north and western India would neatly demark the two regions of low and high SRB. Except for some isolated pockets (such as around Salem district in Tamil Nadu), the SRB was less than 105 in east and south India. In much of north and western India, the SRB was more than 105, and was in excess of 110 in Punjab, Haryana and Gujarat. The map drawn using the data on births during the year preceding the census (Figure 3) shows that the region with the SRB in excess of 110 has expanded considerably to cover virtually the entire area above the diagonal line that had SRB higher than 105. Also, the area with SRB less than 105 has shrunk considerably in south India, as many districts in Karnataka, Andhra Pradesh and Tamil Nadu have crossed the threshold. But north-east India has remained relatively untouched by this change.

Evidence from National Family Health Surveys

The NFHS conducted in 1992-93 (NFHS-1) and 1998-99 (NFHS-2) were designed on the lines of Demographic and Health Surveys (DHS) carried out in many developing countries with the financial assistance of USAID. They provide valuable information on birth histories of women, their background characteristics, including antenatal and delivery care during the pregnancy of most recently born children (during the four-year period preceding the survey in NFHS-1 and three-year period preceding the survey in NFHS-2). From NFHS-2, data on anthropometrical indicators and anaemia for all women, and the use of ultrasound and amniocentesis during the pregnancy of the recently born children are also available. As the micro data from the surveys are available in electronic form, they provide greater scope than the census data for the analysis of determinants of the SRB as well as the use of prenatal diagnostic techniques (PNDT). But, as the data on number of births available from the NFHS are relatively small compared to that from the census, the results tend to be more suggestive than confirmatory.

Use and Misuse of Prenatal Diagnostic Techniques

A factor that has recently emerged and has a strong influence on the SRB is the use of sex determination tests during pregnancy followed by abortion of foetuses of the unwanted sex. Although conducting abortions became legal in India in 1971, it is only recently that prenatal diagnostic techniques became widely available. Because of its relative rarity, information on the use of these techniques was not collected in NFHS-1. But in NFHS-2, this information was collected from the mothers who gave birth during the three-year period before the survey. In this survey, the use of PNDT (mainly ultrasound) was reported by mothers in 13 per cent of 32,000 live births that occurred during the three-year period before the survey. The SRB in the reported cases of PNDT was 112 compared with 107 among live births to women who did not report the use of PNDT. Clearly, in a significant percentage of cases, PNDT was misused to abort female foetuses, since if sex-selective abortions were not practised, the SRB would have been close to 105. Even the reported SRB for non-PNDT cases is relatively high indicating that some women may not have disclosed its use.

From the survey data, it is possible to arrive at rough estimates of the misuse of PNDT for sex selection and the true extent of the use of PNDT. To do this, we assume that abortion after PNDT is done only when the fetus is detected to be female. Although some couples may abort male foetuses when all previous births are male, we shall later show that this tendency is pretty weak in India. Also male foetuses may get aborted because of wrong diagnosis; we shall assume that such failures of PNDT are rare.

Let M_U and F_U be the number of male and female live births to reported users of PNDT during the pregnancy of these births. Also let M_N and F_N be the number of male and female live births to reported non-users of PNDT. Let S be the ratio of male-to-female live births when no sex-selective abortion is practised. Using these notations, the SRB among reported users of PNDT can be written as

$$S_U = \frac{M_U}{F_U}.$$

Similarly, the SRB among reported non-users of PNDT can be written as

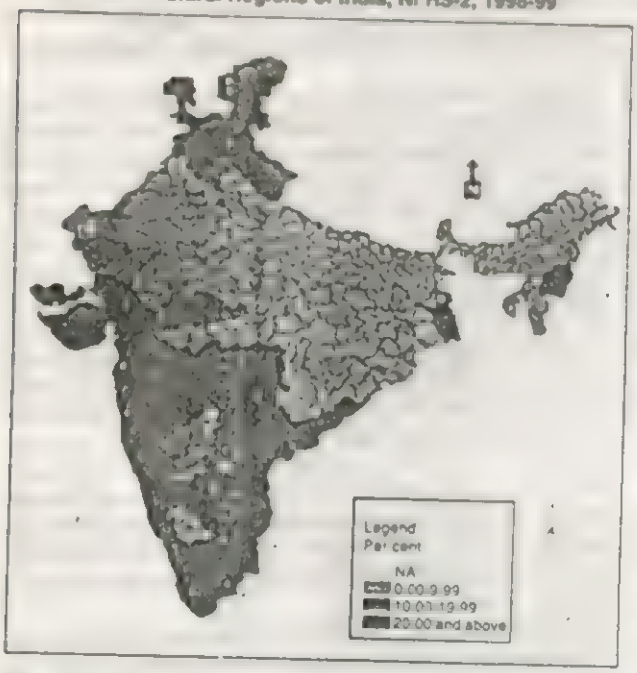
$$S_N = \frac{M_N}{F_N}.$$

If it is assumed that only female foetuses are aborted after PNDT, the number of abortion of female foetuses after PNDT can be computed as

$$A_U = \frac{M_U}{S} - F_U = M_U\left(\frac{1}{S} - \frac{1}{S_U}\right).$$

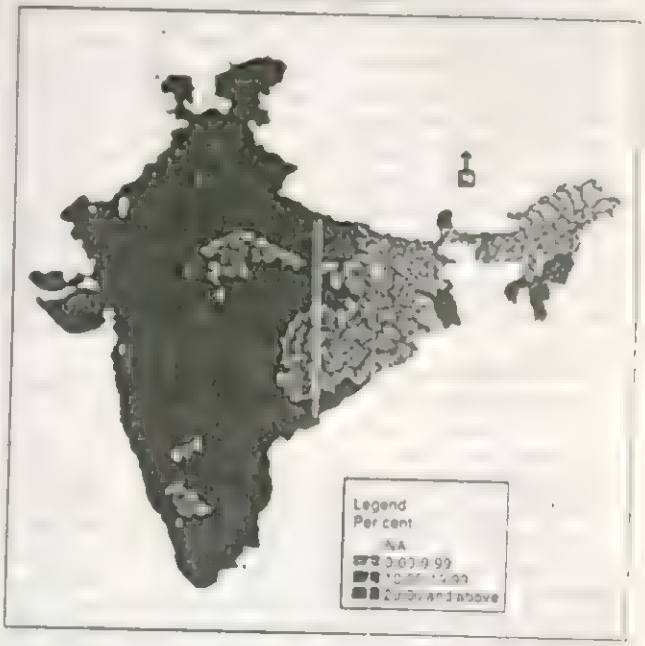
It may be noted that for A_U to be positive, $S_U > S$. If it is not the case, it will be assumed that $A_U = 0$.

Figure 4: Reported Use of Prenatal Diagnostic Techniques in 77 Natural Regions of India, NFHS-2, 1998-99



Source: NFHS-2 micro data.

Figure 5: Reported Use of Prenatal Diagnostic Techniques When Doctor is the ANC Provider, 77 Natural Regions of India, NFHS-2, 1998-99



Source: NFHS-2 micro data

We define the index of the misuse of PNDT as the proportion of female foetuses aborted after the use of PNDT. If all women correctly reported the use of PNDT, then this index is given by

$$\frac{A_U}{F_U + A_U} = 1 - F_U \frac{S}{M_U} = 1 - \frac{S}{S_U}.$$

However, not all users may disclose the use of PNDT. This is indicated by S_N being significantly higher than S. The number of abortion of female foetuses done by reported non-users of PNDT can be computed as

$$A_N = \frac{M_N}{S} - F_N = M_N \left(\frac{1}{S} - \frac{1}{S_N} \right).$$

As before, for A_N to be positive, $S_N > S$. If it is not the case, it will be assumed that $A_N = 0$

Thus the adjusted proportion of female foetuses aborted after PNDT can be computed as

$$\frac{A_U + A_N}{F_U + A_U + A_N}$$

We can also estimate the proportion of foetuses actually subjected to PNDT as

$$\frac{M_U + F_U + A_U + A_N}{M_U + F_U + M_N + F_N + A_U + A_N}$$

In making actual computations, there is the practical problem of assuming a value for S, the SRB in the absence of sex-selective abortions. Although it is thought to be close to 105 males for 100 females, as the census data reviewed earlier show, it could be as low as 103 in India. In order to study the sensitivity of the estimates to the assumed value of S, Table 4 shows estimates of the misuse of PNDT and corrected estimates of PNDT use obtained from the NFHS data using the values of S ranging from 103 to 106. As can be seen from the table, the corrected estimate of PNDT use for all-India is not sensitive to the assumed value of the sex ratio. It varies from 13.5 to 14.7 per cent (against the uncorrected value of 12.8 per cent) when the normal SRB is varied from 106 to 103. The estimate of misuse of the technology by those who reported the use of PNDT is also not very sensitive to the assumption on the normal SRB. It varies from 5 to 8 per cent when the normal SRB is varied from 106 to 103. However, if the observed higher SRB (107) among those who did not report the PNDT use is because of undisclosed use, the estimated misuse of the technology increases from 11 to 27 per cent when the normal SRB is varied from 106 to 103. Nonetheless, these results amply show that majority of the users of PNDT in India do not misuse it to abort female foetuses.

It is useful to investigate whether the use of PNDT and its misuse vary according to background characteristics of women. Table 5 presents information on them. The estimates presented in this table are computed assuming a normal SRB of 105. For

Table 4: Effect of Assumed Value of Normal Sex Ratio at Birth on Estimates of Use and Misuse of Prenatal Diagnostic Techniques

Assumed Normal Sex Ratio at Birth	Estimated Per Cent of Female Foetuses Aborted after PNDT		Adjusted Per Cent of Births Subjected to PNDT
	Est 1	Est 2	
103	7.9	26.6	14.7
104	7.0	22.0	14.3
105	6.1	16.9	13.9
106	5.2	11.3	13.5

Source: NFHS-2 micro data.

India as whole, the SRB of 112 among those who used PNDT indicates that 6 per cent of female foetuses were aborted after PNDT. But if it is assumed that some of those who did not use PNDT may have actually used it, the estimated percentage of female foetuses aborted rises to 17 per cent, and the adjusted use of PNDT is 14 instead of 13 per cent. Those who did not avail antenatal care (ANC) services clearly could not have used PNDT and resorted to female foeticide. Their SRB of 102 also testifies to this. But the SRB among those who availed ANC from a doctor is 112. Twenty-five per cent of them had reported PNDT, which rises to 27 per cent if adjustment is made for the suspected non-disclosure of its use. If the normal sex ratio is 105, the SRB of 111 among PNDT users indicates that 6 per cent of the users may have used the technology to abort female foetuses. But this estimate rises to 23 per cent if an adjustment is made for the possibility that some of the reported non-users of PNDT users did not disclose its use (since the SRB among this group is 113). Among women who availed PNDT from providers other than the doctor, 5 per cent had reported the use of PNDT, and it is estimated that 24 per cent of them had misused it. In this group, among those who did not report the use of PNDT, the SRB is 101, indicating no misreporting of the PNDT status.

In urban areas, 31 per cent of live births were reportedly subjected to PNDT compared with only 8 per cent in rural areas. On the assumption that reported PNDT use is correct, 8 per cent of those who used PNDT misused it in urban areas while

Table 5 Reported and Adjusted Use of Prenatal Diagnostic Technologies and Estimated Percentage of Females Foetuses Aborted After the Use of These Technologies by Selected Background Characteristics, NFHS-2, 1998-99

Variables	Total Births in the Sample	Per Cent of Births Subjected to PNDT		Sex Ratio at Birth			Per Cent of Female Foetuses Aborted after PNDT	
		Reported	Adjusted	All Births	PNDT Not Reported	PNDT Reported	Est 1	Est 2
Total	32,228	12.8	13.9	107.7	107.1	111.8	6.1	16.9
ANC status at pregnancy								
No ANC	10,987	0.0	0.0	102.4	102.4	0.0	0.0	0.0
ANC by doctor	15,746	24.5	27.0	112.6	113.1	111.1	5.5	22.8
ANC by others	5,395	5.0	5.3	104.7	104.0	119.5	12.1	12.1
Residence								
Rural	25,064	7.7	8.8	107.6	107.4	109.8	4.4	24.4
Urban	7,164	30.8	31.8	108.1	105.7	113.6	7.5	8.9
Region								
East	4,421	5.0	8.7	114.2	114.6	106.5	1.4	62.6
South	6,132	27.9	27.9	102.0	102.7	100.2	0.0	0.0
West	4,421	26.0	27.3	108.8	107.1	112.9	7.8	12.6
North-west	2,047	17.2	22.0	119.2	114.8	14 .4	27.3	46.7
North-central	15,211	4.8	5.2	106.4	105.5	12o.4	16.9	24.3
Birth order								
1	9,299	20.8	21.8	106.9	106.3	101.8	0.0	10.3
2	8,333	15.5	16.9	108.9	108.8	109.3	3.9	19.4
3	5,708	9.3	10.5	108.0	106.3	126.1	16.7	25.2
4+	8,892	4.3	5.3	107.3	105.3	166.9	37.1	40.0
Sex composition of sibling								
All sisters, no brother	7,874	13.9	16.9	119.1	116.2	138.7	24.3	51.2
All brothers, no sister	7,176	11.7	11.7	100.5	100.3	102.2	0.0	0.0
Other combinations	17,162	12.8	13.2	105.9	106.2	104.0	0.0	7.2
Religion								
Hindus	25,534	12.2	13.5	108.3	107.4	114.7	8.5	21.1
Muslims	5,042	12.0	12.0	101.4	101.8	96.0	0.0	0.0
Others	1,670	26.1	28.3	111.9	112.8	110.2	4.9	19.9
Caste								
Scheduled caste/tribe	9,491	6.3	7.8	108.7	108.8	107.7	2.5	35.8
Other backward caste	10,358	14.0	14.1	105.4	105.3	106.6	1.5	2.9
Others	12,000	17.4	19.2	110.0	108.7	116.5	9.9	22.0
Parents' educational level								
Both parents illiterate	8,922	2.7	2.8	105.1	105.3	96.7	0.0	10.2
Only father literate	9,890	5.3	5.7	104.3	103.4	121.5	13.6	13.6
Mother less than middle	5,821	14.2	14.2	103.2	103.3	102.5	0.0	0.0
Mother middle or more	7,510	33.8	37.6	119.0	121.4	114.2	8.1	27.8
Standard of living								
Low SLI	11,638	3.8	4.5	105.9	106.5	93.9	0.0	24.6
Medium SLI	15,068	11.8	12.2	106.1	106.0	107.4	2.2	8.4
High SLI	5,125	35.8	38.8	116.2	114.2	120.0	12.5	23.3
Mother's media exposure								
No exposure	15,314	2.7	2.9	105.2	104.9	115.9	9.4	9.4
Regular exposure	16,885	22.0	23.7	110.0	109.7	111.3	5.7	18.0
Mother's work status								
Not working	22,282	14.9	16.7	109.8	108.6	116.3	9.7	23.9
Working, not for wage	5,135	9.1	9.1	104.1	104.7	97.9	0.0	0.0
Working for wage	4,804	7.4	7.4	102.4	103.2	91.9	0.0	0.0
Mother's ideal family size								
1-2	15,480	21.5	24.4	113.8	114.3	112.1	6.4	28.0
3	8,675	5.8	7.7	109.5	108.8	120.7	13.0	43.8
4+ or non-numeric	8,073	3.9	3.9	95.1	95.1	96.2	0.0	0.0

Source NFHS-2 micro data.

4 per cent did so in rural areas. But the sex ratio of those who did not report the use of PNDT shows that 32 per cent in urban areas and 9 per cent in rural areas may actually have used it, and among them 9 per cent in urban areas and 24 per cent in rural areas may have misused it. Thus the use of PNDT is certainly much higher in urban areas than in rural areas, but it is not altogether clear as to where the misuse is higher.

The use of PNDT is relatively high in south and western regions of India where the reported use is 27-28 per cent. The reported use is less than 5 per cent in east and north-central regions of India. In north-western parts of the country, where the child sex ratios are high, the reported use is moderate (17 per cent). The strong regional pattern in the reported use is clearly seen in Figure 4 where we have mapped the use-rate for 77 for natural regions of the country. One reason for the relatively high use of PNDT in south and western parts of the country could be that there the use of ANC services, especially from a doctor, is high. However, as the map in Figure 5 shows, even when only cases with ANC by a doctor are considered, the regional pattern in the use of PNDT does not disappear. Reported use of ultrasound or amniocentesis is rare in east and north-central India, even when ANC is availed from a doctor.

Although south India shows the highest use rate of PNDT, misuse of the technology is rare; as a consequence, the SRB is less than 105 in this region among both users and non-users (Table 5). In the north-central region though the use of PNDT is rare, misuse among those who use it is high (17-24 per cent). But it is in the north-western region, where the misuse of PNDT is most frequent (27-47 per cent). For north-western India, when the reported use is adjusted for its possible under-reporting, the implied use rate increases from 17 to 22 per cent. In other regions, the implied corrections for underreporting are small. Although east India shows the highest percentage of misuse if the high SRB for non-users is taken into account, it is most probably due to sampling errors in the data than the actual misreporting of PNDT status.

The reported use of PNDT declines as the order of birth increases. But the misuse of the technology increases with the birth order. The reported use is 21 per cent for the first birth order but the estimated misuse, at the maximum, is only 10 per cent. On the other hand, when the birth order is four or more, only 4 per cent report the use of PNDT but nearly 40 per cent resort to abortion if the fetus is female. Thus in the case of first birth, the predominant reason for the use of PNDT is to detect abnormalities of the fetus, while at higher orders the main reason for the use is to detect the sex of the child. The reported use of PNDT doesn't show significant variations with sex composition of previous children born to the woman But the misuse of the technology is highest when the woman had no son, but had one or more daughters. Among such women, the misuse is estimated to be 24-51 per cent. When women had no daughter but had one or more sons, the SRB is 101, and 102 for women reporting PNDT use. While this may be suggesting abortion of male foetuses by such women, the difference from the normal sex ratio can also be due to sampling errors. On the other hand, the SRB for women who had no sons but had two or more daughters is substantially high to be attributed to sampling errors (119 for all births and 139 for births with reported use of PNDT).

The reported use of PNDT is 12 per cent among Hindus and Muslims, and 26 per cent among other religions (mainly Christians and Sikhs). While those who misuse the technology are negligible among Muslims, it is 8-21 per cent among Hindus and 5-20 per cent among other religions. As would be expected, the reported use of PNDT increases from 6 per cent among scheduled castes/tribes to 14 per cent among other backward classes (OBCs) and 17 per cent among others. But the misuse of the technology is least among OBCs (2-3 per cent) while it is relatively high among other castes (10-22 per cent).

The use of the technology increases with the level of education of parents. When both the mother and father are illiterate, only 2 per cent use PNDT. When only the father is literate, this increases to 5 per cent. When the mother has completed high school or gone to college, the reported use is 42 per cent. The misuse does not show a consistent relationship with education. It is low when both the mother and father are illiterate (0-10 per cent), but relatively high when the father is literate but the mother is not (14 per cent) and when the mother has competed high school or gone to college (9-28 per cent). Interestingly, misuse is almost negligible among mothers who are literate but have not completed middle school. To study the relationship of use and misuse of PNDT with the prosperity of households we use an index of

Table 6: Results of Logit Analysis of Determinants of the Use of Prenatal Diagnostic Technologies, NFHS-2, 1998-99

Explanatory Variables	Coefficient
Maternal age	0.105 **
Maternal age squared	-0.0008
Paternal age	0.134 ***
Paternal age squared	-0.0017 ***
Order of birth 3+ (no = 0)	-0.260 ***
No surviving male sibling and order 2 or higher (yes = 0)	0.082
No surviving female sibling and order 2 or higher (yes = 0)	-0.206 ***
Urban residence (rural = 0)	0.743 ***
Educational level (mother and father illiterate =0)	
Mother illiterate, father literate	0.360 ***
Mother less than primary	0.683 ***
Mother middle school	0.819 ***
Mother high school +	1.189 ***
Regular exposure to mass media (no = 0)	0.661 ***
Standard of living (low = 0)	
Moderate	0.415 ***
High	1.107 ***
Religion (Hindu = 0)	
Muslim	0.101
Christian	0.485 ***
Sikh	0.094
Others	0.374 **
Caste/tribe (others = 0)	
Scheduled tribe	-0.589 ***
Scheduled caste	-0.308 ***
Other backward castes	-0.086
Female work status (not working=0)	
Working for wages	-0.015
Others	-0.199 **
Ideal number of children reported by mother	-0.449 ***
Ideal number of children squared	0.0278 ***
Non-numeric ideal children (numeric = 0)	-1.000 ***
Health worker visit during pregnancy (no = 0)	-0.275 ***
Region (south=0)	
East	-1.755 ***
West	0.060
North-west	-1.225 ***
North-central	-1.529 ***
Constant	-5.697 ***
Number of births	31,481
-2 Log-likelihood	16,671
Pseudo R^2	0.231

Note: * p<0.05, ** p<0.01, *** p<0.001.
Source: NFHS-2 micro data.

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standard of living (SLI) computed from household amenities and assets [IIPS and ORC Macro 2000]. The reported use of PNDT increases from 3 per cent in low SLI households to 38 per cent in high SLI households. The estimated misuse among reported PNDT users also increases from zero per cent in the low SLI group to 2 per cent in the medium SLI group and 13 per cent in the high SLI group. But when adjusted for the possible misreporting of PNDT status, the estimated misuse of PNDT in the low SLI group (24 per cent) turns out to be as high as in the high SLI group (23 per cent) and substantially higher than the medium SLI group (8 per cent).

The reported uses of PNDT increases with the mother's exposure to media. But it does not show a clear relationship with misuse. When only the reported use of PNDT is considered, misuse is marginally lower among women regularly exposed to media. But when adjusted for possible underreporting of PNDT, the estimated misuse is higher among women regularly exposed to media. Women's work status however has a clear relationship with both use and misuse of PNDT. Both use and misuse are higher among non-working women compared with women working for wage or those who are self-employed or working in the family farm or business. Reported as well as the adjusted use rates increase with mother's ideal family size. When the ideal family size is one or two, 22-24 per cent had PNDT. When the ideal family size is four or more, only 4 per cent use PNDT. The misuse is highest when the ideal family size is three (13-44 per cent), moderate when it is one or two (6-28 per cent) and negligible when it is four or more.

The foregoing analysis shows that the use of PNDT tends to be systematically related to socio-economic factors, and the adjustments needed for possible under-reporting of its use are relatively minor. Therefore, without significantly biasing the results, one can apply the multivariate techniques to the reported data on PNDT use to study the independent effects of key socio-economic variables on the use of PNDT. Accordingly, Table 6 shows the results of logistic regression of the determinants of PNDT use. As the table shows, most of the variables used in the regression have significant, independent effects on the use of PNDT. The use of PNDT increases with maternal as well as paternal age. But the use of this technology is lower if the order of birth is three or more. It is particularly low if the mother has already given birth to a son.

Urban residence, educational level, exposure to media and standard of living show strong, independent and positive effects on the use of PNDT. Its use is higher among Christians, and if the religion is other than Hindu, Muslim or Sikh. The use is lower among members of scheduled tribes and scheduled castes, even after controlling for standard of living and educational level. When compared with non-workers, the use is lower among mothers who work but not for wage. The use of PNDT is lower among mothers having larger ideal family sizes and among those who gave non-numeric answer to the question on ideal family size. Women who were visited by health workers during the pregnancy report lower use of PNDT. This finding is directly in contradiction with the claim of some activists that public health workers act as conduits of this technology in rural areas. Even after controlling these variables, eastern, north-central and north-western parts of India show lower use of PNDT than southern states. In other words, the geographical pattern seen in the PNDT use cannot fully be explained by the observed socio-economic variations. This indicates the influence of neighbourhood on the use of technology.

Determinates of Sex Ratio at Birth

In recent years the use of PNDT has emerged as the key intervening variable through which other factors influence the SRB in India. There are, however, a number of factors that independently affect the SRB. Teitelbaum (1972) provides an early review of the literature on this subject. James (1987) and Waldren (1998) provide a more recent review of the literature. Chahnazarian (1988) has applied multivariate techniques to test the independent effects of some of these variables using vital statistics data for several countries. For India, Retherford and Roy (2003) have used the NFHS data to test the significance of a limited set of factors. Here, using the same data set, an attempt is made to test the significance of far more variables on the SRB.

Accordingly, Table 7 shows the results of the logit analysis of determinants of the SRB using the data from NFHS-1 and NFHS-2. The results presented are with respect to the probability of having a male birth. Two sets of regression results are presented for each of the surveys, one using data on births that occurred during the 0-14 years before the survey, and another using data on births that occurred 0-4 years (for NFHS-1) and 0-3 years (for NFHS-2) before the survey. While the first set of regressions is based on larger sample of births, the latter set takes advantage of having information on more variables for the more recent births. Nonetheless, none of the regressions is able to account for more than 1 per cent of the variation in the probability of male birth (as indicated by values of pseudo R^2), which underscores the random nature of sex determination at birth. Since in such a situation statistically significant effects could be detected only in large samples, we have checked whether some additional variables become significant when 10 per cent probability level is employed for rejection of null hypothesis.

The most notable results from these regressions are with respect to the effects of sex composition of previously born children and the use of PNDT on the probability of male birth. Although order of birth doesn't show statistically significant relationship in any of the regressions, regressions using the NFHS-2 data set show that if the mother had at least one previous birth but had no son at the time of current birth, the probability of the birth being a male is higher and this effect is strongly significant. This suggests that such women were not resorting to sex-selective abortion in the 1980s but had begun to do so in the 1990s. The female-selection situation, characterised by women who had at least one previous child but had no daughter, reduces the probability of male birth, but its effect in the regressions is only mildly significant at 10 per cent level.

Information on the use of PNDT is available only for the recent births from NFHS-2. The regression using this data shows that PNDT use does not have a direct effect on the SRB. To test whether its effect depends on the sex-selection situation, we have interacted its use with dummy variables for male- and female-selection situations. As the results show, when women in male-selection situation (at least one previous birth and no sons) use PNDT, it has strong positive effect on the probability of male birth. Its effect in the case of women with female-selection situation is not in the expected direction (i e, negative), and also not statistically significant. It may be noted that male-selection

Table 7: Results of Logit Analysis of Determinates of Probability of Having a Male Birth NFHS-1, 1992-93 and NFHS-2, 1998-99

Explanatory Variables	Births during 0-14 Years Before Survey		Births during	
	NFHS-1	NFHS-2	1989-92 NFHS-1	1996-98 NFHS-2
Maternal age	0.015**	-0.004	0 013	0.012
Maternal age squared	-0.0003**	0.0002	-0.0003	-0.0002
Paternal age	-0.009*	-0.006	-0.005	-0.030**
Paternal age squared	0.0001*	0.0001	0.0001	0.0005***
Paternal age not reported (reported = 0)	0.027	-0.070	na	na
Order of birth	0.002	0 000	0.011	0 011
No surviving male sibling and order 2 or higher (yes = 0)	-0.002	0.043***	0.004	0.110***
No surviving female sibling and order 2 or higher (yes = 0)	-0.025*	-0.022**	-0.035*	-0.041
Urban residence (rural = 0)	0.024**	-0.017	0.016	-0.039
Educational level (mother and father illiterate =0)				
Mother illiterate, father literate	-0.014	-0.007	-0.010	-0.025
Mother less than primary	-0.016	0.011	-0.073**	-0.017
Mother middle school	0.005	0 020	0.009	0.090*
Mother high school +	-0.064***	0 038*	-0.127***	0.068
Regular exposure to mass media (no = 0)	0.000	0 020	-0.020	-0.009
Standard of living (low = 0)				
Moderate	-0.018	-0.026**	-0.014	-0.005
High	0.007	-0 020	0.029	0.044
Religion (Hindu = 0)				
Muslim	-0.028*	0.013	-0 035	0.020
Christian	0.013	0.045*	0 012	0 031
Sikh	0.043	0.033	-0.014	-0.092
Buddhist	0.028	0 055	0.197*	-0.107
Others	0.040	0.037	-0.001	0.064
Caste/tribe (others = 0)				
Scheduled tribe	0.015	0.016	0.027	0.006
Scheduled caste	0.020	0 010	0.025	0.060*
Other backward class		0.011		-0.006
Female work status (Not working=0)				
Working for wages	-0.013	-0 010	-0 059**	-0.051
Others	0.004	-0.002	0.014	-0.014
Ideal number of children reported by mother	-0.043***	-0 070***	-0.043**	-0.064*
Ideal number of children squared	0.0018**	0.0046***	0.0016	0 0003
Non-numeric ideal children (numeric = 0)	-0.134***	-0.156***	-0.076	-0 232***
Consanguinity (no = 0)	-0.016	na	0.012	na
Health worker visited during pregnancy (no = 0)	na	na	0 032	-0 017
Birth attendance (untrained birth attendant=0)	na	na		
Trained birth attendant at home	na	na	0 085***	0.076*
Trained birth attendant at institution	na	na	0.040	0 070**
Iron and folic acid supplementation (no = 0)				
Received tablets/syrup	na	na	0.016	0.022
Fully consumed	na	na	na	-0 041
Number of antenatal check-ups	na	na	0 008*	0 000
Maternal anaemia at survey				
Mild	na	-0 015	na	0.002
Moderate/severe	na	-0.044***	na	0.002
Not tested	na	-0 025	na	-0.113**
Mother's body-mass index at survey (normal = 0)				
Low (below 18.5 kg/m2)	na	0 005	na	0 032
High (25 kg/m2 or more)	na	-0 048**	na	-0.139*
Not measured	na	-0 202***	na	-0.119***
Mother's height at survey	na	0 007	na	-0 301
Mother's height not measured (measured = 0)	na	-0 029	na	0 029
Use of PNDT (no=0)	na	na	na	-0.056
Interaction with PNDT use				
No surviving male sibling and order 2 or higher	na	na	na	0 228***
No surviving female sibling and order 2 or higher	na	na	na	0 015
Altitude more than 1,000 metres (lower = 0)	na	-0 035*	na	0 029
Region (south = 0)				
East	0.023	0 043**	0.079**	0.078*
West	-0.002	0.041*	0.040	0 060
North-west	0.043**	0 090***	0.129***	0.147***
North-central	0.051***	0 082***	0 090***	0 090**
Constant	0.110	0 317***	-0 051	0 550
Number of live births	1,75,815	1,58,840	53,591	31,353
-2 Log-likelihood	2,43,431	2,19,726	74,163	43,234
Pseudo R^2	0.001	0 002	0.002	0 005

Notes: * p<0 10, ** p<0.05, *** p<0.01.
na - not available/applicable.
Source: NFHS-2 micro data.

situation shows positive effect on the probability of having a male birth even in the absence of PNDT use, indicating that some women must have suppressed its use.

Another important result is with respect to the effects of antenatal and delivery care. In both NFHS-1 and NFHS-2, data on antenatal and natal care are available only for the recent births (for the last four years in NFHS-1 and last three years in NFHS-2). Both data sets show that the SRB is higher when trained personnel attend the birth. This could be due to the reduction in stillbirths when they attend the birth. But number of antenatal care check-ups and consumption of iron and folic acid tablets or syrup during pregnancy appear to have no effect on the SRB.

Urban residence, educational level, standard of living, exposure to mass media, religion and caste generally do not show statistically significant or consistent relationship in all the regressions. Mothers with high school education or higher have reported lower proportion of males in their births in NFHS-1. But in NFHS-2 they have reported more males in their births, and the effect is mildly significant in the regression using data for births during 0-14 years before the survey. Mothers working for wage report lower probability of male births in all the regressions but the effect is statistically significant only in data on births during 0-14 years before NFHS-2. The regression results show that the SRB increases as the mothers' ideal number of children decreases, though in a non-linear fashion. This effect is strongly significant in all the regressions. Also, those who gave non-numeric response to the question on ideal family size had fewer sons. This would seem consistent with the contention of some female activists that incidence of sex-selective abortions increases with the decrease in family size. However, the fact that this effect is also found in NFHS-1 data for the period when the incidence of female feticides were rare (as indicated by the insignificance of the variable representing the male-selection situation) suggests that the observed relationship is spurious: Those who had sons tend to use contraception more than those who had daughters; in order to justify their non-use of contraception, the latter group has the tendency to report higher ideal family size.

Maternal and paternal ages show statistically significant relationship with the SRB in some of the regressions. In births that occurred during 0-14 years before NFHS-1, maternal age shows statistically significant non-linear relationship, indicating initially a rise in the SRB with maternal age and then a fall at older ages. This may be attributed to a similar relationship of maternal age with stillbirth rate. But this relationship is not seen in the data from NFHS-2. As the role of men in sex determination of the fetus is well established, their age could have a bearing on the SRB. Some researchers have found that the SRB decreases with paternal age and speculated that it is due to the decrease in coital frequency with age [e g, Chahnazarian 1988]. All of our regressions indicate that the SRB initially decreases with paternal age and then rises at advanced ages. This effect is strongly significant in births that occurred 0-3 years before NFHS-2 and mildly significant in the regression that used births during 0-14 years before NFHS-1. While the initial decrease is as expected, the suggested rise after age 30 or so needs further investigation. The significance of the quadratic term in the regressions may simply be indicating that the rate of decrement diminishes with age.

The possibility of maternal malnutrition influencing the SRB has been discussed in the literature on this subject. Andersson and Bergstrom (1998) had found that short maternal stature and obesity were independently related to low SRB in Africa. Data on mother's nutritional status and anaemia are available only from NFHS-2. When data on births during 0-14 years are used (i e, larger sample of births), moderate and severe anaemia show strong negative effects on the SRB. Mother's height does not show any effect on the SRB, but the results strongly suggest that obese women tend to have fewer sons. But it should be noted that NFHS data on maternal anaemia and body-mass index refer to the time of the survey rather than to the time of birth. Also to be noted is that women for whom data on body-mass index were not available had significantly lower SRB. This index was not calculated for pregnant women and those who had given birth during the two months before the survey. Such women were likely to have had more female births in the past because in societies with strong son preference, those who had sons are more likely to use contraception and stop childbearing.

Data on altitude are available only from NFHS-2. When births during the 0-14 years before the survey are considered, there is a weak indication that higher altitudes reduce the chance of male birth. This may be because of lower temperature and higher male fetal mortality at higher altitudes. It is also possible that people living at higher altitudes are genetically different from those living in low-lying areas. The information on consanguinity was collected only in NFHS-1. It shows no statistically significant relationship with the SRB. But owing to the limitations of the information on consanguinity collected in NFHS-1, it served as a poor proxy for the level of inbreeding. In all the regressions, even after controlling for the foregoing factors, the SRB is significantly higher in north-western and north-central regions. This could be because of greater misuse of PNDT in these parts. However, as these regional differences are also significant (but smaller) in the regressions that use NFHS-1 data, they may be indicating the presence of some genetic factors such as levels of circulating gonadotrophin, or a tendency to under-report female births in northern India.

Summary and Conclusions

In recent years the use of PNDT, followed by sex-selective abortion has emerged as a powerful determinant of SRB in India. In this paper we have analysed the factors influencing the use of PNDT as well as SRB. We present evidence from the recently released data on fertility from the 2001 Census as well as from the NFHS. The census fertility data suggest that SRB in India may have increased to 110, and in some areas, to as high as 130. But this data may have been affected by under-reporting of female births. However, even this data show that the SRB in south and eastern India is well within the range observed under normal circumstances, and thus discount the possibility of widespread use of sex-selective abortions in these areas. The census data also show that though there may be little rural-urban difference in the SRB, among the educated class the SRB is abnormally high.

The data collected in NFHS-2 (1998-99) show that 13 per cent of live births were subjected to PNDT, and 6 per cent of female foetuses may have been aborted after PNDT. But, if possible under-reporting is taken into account, PNDT may have been used in 14 per cent of the cases, and in 17 per cent of such cases female foetuses may have been aborted. The use of PNDT is higher in southern and western regions of India while its misuse for

selectively aborting female foetuses is higher in the north, especially in the north-western parts of the country. Also, the use of these techniques is higher at lower parities but their misuse is more at higher parities, especially if women had only daughters.

As would be expected, the use of PNDT is much higher in urban areas, among educated women, those with higher levels of standard of living, non-working women and those regularly exposed to media. The multivariate analysis applied to the data shows that these factors have independent effects on the use of PNDT. But they do not show a clear-cut relationship with its misuse. This may be because users of PNDT in the NFHS sample are not large enough to infer the patterns unambiguously. Interestingly, the analysis shows that those who reported the visit of health workers during pregnancy of the index birth have used the PNDT less than others. This contradicts the allegation of some activists who claim that government health workers are often used as conduits by private agencies to promote the use of this technology in rural India.

The analysis of determinants of SRB shows that PNDT use does not have a direct effect on the SRB because it is not generally misused. But the analysis shows that when women in male-selection situation (i e, with at least one previous birth but had no sons) use PNDT, it has a strong positive effect on the probability of male birth. It was found that women in male-selection situation have higher SRB even in the absence of PNDT use, indicating that some women must have suppressed its use in the survey.

Beyond the use of PNDT and sex composition of previously born children, several other factors are also found to influence the SRB. The SRB was higher when a skilled person attended the delivery. There was evidence suggesting that the SRB initially increases and then deceases with maternal age. On the other hand, there was even stronger evidence indicating that the SRB decreases with paternal age initially and then increases with it. Maternal anaemia and obesity are found to decrease the SRB. There was evidence, albeit weak, that SRB is lower at higher altitudes. Urban residence, educational level, standard of living, religion and caste/tribe failed to show significant or consistent relationship with the SRB. However, regressions suggested that probability of male birth was lower for wage-earning women. In spite of controlling for many socio-economic and demographic factors, the SRB was higher in north India, especially in north-western parts, indicating that women in these regions misused the technology more than others. But the role of some genetic factors or under-reporting of female births in explaining a part of the remaining regional variations cannot be completely ruled out.

Although, the study focused on the characteristics of women in analysing the determinants of use and misuse of PNDT, we do not mean to suggest that their husbands had no part to play. Indeed, it is likely that women went for PNDT on the coaxing of their husbands and other family members. But the differentials in the use and misuse are likely to be governed more by women's characteristics because: in a culture of silence, the woman's involvement in decision-making would be more to do with her own characteristics (education, occupation, income, etc) than that of her husband's. Also, as the NFHS had collected data from women, it was more appropriate to study the determinants in terms of their own characteristics or those they share with their husbands (religion, caste, standard of living, parity, etc).

In conclusion, although the use of PNDT is now fairly common in many parts of India, only a minority of couples who use these techniques misuses it for aborting female foetuses. While income and education do increase the use of PNDT, their misuse is governed more by cultural factors and sex composition of children already born. The higher SRB observed among more educated and higher income groups is mainly because of their better access to these techniques rather than from their greater misuse. EPW

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Why are child malnutrition levels not improving?

A.K. Shiva Kumar

India's tardy performance can be traced to the limited progress in providing basic health care.

According to the recently released National Family Health Survey-3 for 2005-06, 46 per cent of children below the age of three are underweight — down from 47 per cent in 1998-99. It is disappointing that despite the acceleration in economic growth and the country's economic buoyancy, there has been only a one percentage point reduction in the proportion of underweight children at the end of seven years. NFHS-3 offers insights into some of the factors that account for the abysmal progress in reducing child malnutrition.

One, improvements in expanding the reach and coverage of public health services over the past seven years have been very limited. For instance, only 44 per cent of children aged 12 to 23 months were fully immunised in 2005-06 — up from 42 per cent in 1998-99 and 36 per cent in 1998-99. As a matter of fact, immunisation coverage in urban areas has slipped from 61 per cent in 1998-99 to 58 per cent in 2005-06 and has increased only slightly in rural areas from 37 per cent to 39 per cent. The proportion of fully immunised children has declined during this period, surprisingly, in eight States — Andhra Pradesh, Gujarat, Himachal Pradesh, Karnataka, Kerala, Maharashtra, Punjab, and Tamil Nadu — generally regarded as better performing in health and economically more prosperous.

Two, access to critical components of treatment of childhood diseases has deteriorated over the past seven years. For instance, the proportion of children with diarrhoea who received oral rehydration salts (ORS) in the two weeks preceding the NFHS-3 survey had risen from 18 per cent in 1992-93 to 27 per cent in 1998-99; but since fell to 26 per cent in 2005-06.

Three, critical public health messages are simply not reaching families with children. Public health experts, for instance, have for long emphasised the importance of exclusive breastfeeding during the first six months of a baby's life. Despite this, in 2005-06, only 23 per cent of infants up to five months old were exclusively breastfed — up from 16 per cent in 1998-99, an increase of seven percentage points over seven years.

Four, levels of child malnutrition are closely linked to the care women receive during pregnancy and thereafter. NFHS-3 reveals very little progress in women's access to maternal health services. Between 1998-99 and 2005-06, the proportion of births assisted by a doctor, nurse, woman health worker, auxiliary nurse midwife or other health personnel went up marginally from 42 to 48 per cent; and institutional births went up from 36 to 41 per cent over the same period.

Finally, closely linked to the health and nutritional status of children is the health of mothers. In 1998-99, 36 per cent of married women aged 15 to 49 had a Body Mass Index (BMI) below normal. The proportion fell marginally to 33 per cent in 2005-06. Levels of anaemia, high in 1998-99, have risen further to 56 per cent among married women and to 58 per cent among pregnant women.

Some States have done better than others in terms of reducing child malnutrition. And there are lessons to be learned from the better performing States. For instance, between 1998-99 and 2005-06, Maharashtra, Orissa, Himachal Pradesh, Jammu and Kashmir, and Chhattisgarh recorded the maximum reductions in child malnutrition. At the other extreme are Bihar, Jharkhand, Assam, Madhya Pradesh, and Haryana where the proportion of underweight children has, in fact, gone up. What can explain the differential performance of these two sets of States?

Initial conditions in terms of levels of malnutrition, socioeconomic development, and poverty do not seem to influence performance over time. For example, we find both low and high levels of child malnutrition among States that have done well to reduce child malnutrition and those that haven't. Included in the set of 'good' performers are Jammu and Kashmir (29 per cent), Himachal Pradesh (36 per cent), Maharashtra (40 per cent), and Orissa (44 per cent) with lower-than-national-average levels of child malnutrition as well as Chhattisgarh (52 per cent) with a higher-than-national-average percentage of underweight children. Similarly, included in the set of 'poor' performers are States with lower-than-national-average levels of child malnutrition — Assam (40 per cent) and Haryana (42 per cent) — as well as States with higher-than-national-average proportions of underweight children — Bihar (58 per cent), Jharkhand (59 per cent), and Madhya Pradesh (60 per cent).

Again, initial levels of income do not seem to matter when it comes to performance in reducing child malnutrition. There are relatively low and high income States among both 'better' and 'poor' performers. Maharashtra, a rich State, features among the top five performers and Haryana, another rich State, features among the poor performers. And among the 'good' performers is Orissa — a relatively low income State. Levels of female literacy do not also show any discernible pattern. In the set of 'good' performers are Jammu and Kashmir, Orissa, and Chhattisgarh where female literacy levels are lower than the national average. And among the 'poor' performers are Assam and Haryana where female literacy rates are higher than the national average. Once again, we find that among the 'good' performers are States with relatively high levels of infant mortality (Chhattisgarh and Orissa). Similarly, also included in the set of poor performers are Haryana and Assam — States with relatively low levels of infant mortality.

Economic growth rates and efforts at reducing income poverty are also not associated with reductions in child malnutrition in any predictable manner. For example, growth rates in per capita income between 1998-99 and 2003-04 varied between 1.7 and 4.1 per cent in the set of 'good' performers; and between 1.7 and 4.9 per cent in the set of 'poor' performers. Similarly, the association between reductions in child malnutrition and poverty levels is not obvious. Between 1999 and 2005, with the exception of Haryana where it has gone up, the headcount poverty ratio has decreased in both sets of States. In the category of poor performers are States that show a relatively large decline in the proportion of poor, namely Assam and Bihar.

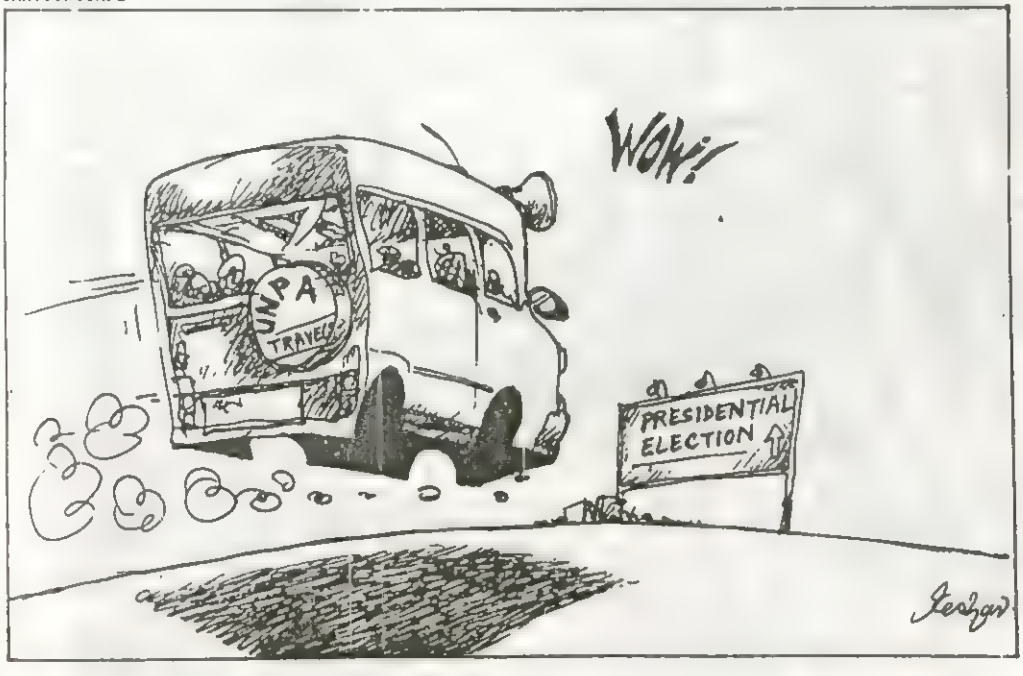
Some explanations for differential performance in reducing child malnutrition can be found by examining trends in health provisioning, improvements in child care, and health status of women between 1998-99 and 2005-06 across the two sets of States. Women's nutritional status has shown greater improvements in States where child malnutrition has come down than among poorly performing States. Similarly, we find that child care practices show greater improvement in the better performing States than in the poorly performing States. For instance, the proportion of children under the age of three breastfed within one hour of birth has shown larger improvements in the five 'good' performing States. Similarly, the better performing States show greater improvements in the reach of public health services. For example, the percentage of children with diarrhoea who received ORS has shown improvement in four of the five 'good' performers (the exception being Jammu and Kashmir) whereas it has shown a decline in four of the five poorly performing States. In short, effectiveness in reducing child malnutrition seems to be closely linked to improvements in access to, and reach of, health services, care of children, and the nutritional status of mothers.

To conclude, NFHS-3 reveals that progress in lowering levels of child malnutrition over the past seven years has been extremely poor. There is nevertheless much to learn from the differential performance of Indian States in terms of what it takes to reduce levels of child malnutrition. Success in reducing malnutrition is not so obviously dependent upon initial conditions in terms of a State's levels of child malnutrition, infant survival, socioeconomic development, poverty, and even female literacy. At the same time progress in reducing child malnutrition does not seem to depend so much on economic growth rates or efforts at reducing income poverty.

Effectiveness in reducing child malnutrition is, among other factors, closely linked to improvements in access to, and reach of, health services, care of children, and nutritional status of women.

NFHS-3 reveals that India's extremely tardy performance in terms of reducing child malnutrition can be traced to the limited progress in the provisioning of basic health care. It is particularly important to focus on improving infant feeding and caring practices as well as the nutritional well-being of mothers. The latter is critical if the inter-generational transfer of malnutrition from the mother to-the child — captured in the high proportion of low birthweight babies — is to be checked. The nutritional well-being of newborn babies and children under the age of three deserves the topmost attention. It is not enough to talk about the demographic advantage that India enjoys; the real challenge lies in ensuring that the young in India do enjoy improved nutritional and other facilities.

CARTOONSCAPE



Why are levels of child malnutrition high?

A.K. Shiva Kumar

Reducing child malnutrition requires enhancing women's freedoms and promoting gender equality.

Levels of child malnutrition in India are exceptionally high. According to the recently released National Family Health Survey, NFHS-3, carried out in 2005-06, 46 per cent of India's children under the age of three are underweight. The corresponding levels of child malnutrition are much lower in most other countries – 28 per cent in Sub-Saharan Africa and eight per cent in China. Scientific evidence suggests that compared with the risks a well-nourished child faces, the risk of death from common childhood diseases is doubled for a mildly malnourished child, tripled for a moderately malnourished child, and may be even as high as eight times for a severely malnourished child.

Three commonly used measures – stunting (height-for-age), wasting (height-for-age), and the proportion of those underweight (weight-for-age) – provide somewhat different information about the nutritional status of children. Stunting captures chronic under-nutrition as it reflects a failure to receive adequate nutrition over a long period of time or chronic or recurrent diarrhoea. Wasting captures the thinness of children and indicates the prevalence of acute malnutrition. The third indicator, weight-for-age (underweight), captures elements of both stunting and wasting. The proportion of underweight children is used most widely as a comprehensive measure of malnutrition as it captures elements of both stunting and wasting.

Why are levels of child malnutrition so high in India? Several misconceptions cloud public opinion. Many believe, for instance, that India's low per capita income is the major underlying cause. This is not entirely true. A majority of the countries in Sub-Saharan Africa report lower levels of per capita income than India – and most of them report lower rates of child malnutrition as well. Again, within India, we find that Gujarat and Uttar Pradesh report the same proportion – 47 per cent – of underweight children even though the per capita income in Gujarat is several times higher than in Uttar Pradesh.

Others argue that income poverty is a major underlying cause of child malnutrition. Here too, we find no obvious linkage between levels of child malnutrition and income poverty. For example, 26 per cent of India's population lives below the poverty line and yet 46 per cent of children under the age of three are malnourished. Again, it was believed that use of international growth standards to assess malnutrition is not right. However, extensive studies by the Nutrition Foundation of India have established that the growth patterns of Indian children who are well-fed and well-looked-after are similar to those of adequately nourished children in other parts of the world, no matter where they are born – in New Delhi, New York or New Zealand. Yet others believe that Indian children are malnourished because families are too poor to feed their children. This again is not true as even the poorest of families can set the quantity of food needed to feed an infant – half a chapatti or half a banana or a boiled potato or a bowl of dal.

What then explains the high levels of child malnutrition in India? Answers lie in looking beyond income levels, economic expansion, conventional poverty, and food availability. The first clue is found in the proportion of low birthweight babies. Estimates for India reveal that 20 to 30 per cent of babies weigh less than 2,500 grams at birth. This suggests the onset of malnutrition in the womb itself and reflects an intergenerational transfer of malnutrition from the mother to the child. Adversely affecting the birth of well-nourished babies is also the poor health and nutritional status of women. According to NFHS-3, close to one-third of Indian women suffer from Chronic Energy Deficiency and have a Body Mass Index (BMI) of less than 18.5 kg/m2.

The second factor has to do with the limited reach of public health services and messages. In 2005-06, for instance, only 44 per cent of children aged 12 to 23 months were fully immunised. And only 26 per cent of children with diarrhoea were given oral rehydration salts. Barely two-thirds (64 per cent) of children suffering from acute respiratory infection or fever were taken to a health facility. Also affecting the health and nutritional well-being of children is the limited reach of, and access to, maternal care services. Here again, NFHS-3 reveals some glaring shortfalls. In 2005-06, barely half (51 per cent) of mothers across the country received at least three antenatal care visits during pregnancy; and less than half (48 per cent) of births are attended to by a trained birth attendant, which includes a doctor, nurse, woman health worker, auxiliary nurse midwife, and other health personnel.

The third clue lies in the care of the child. Breast milk provides vital nutrients throughout the first year of life; but it alone is not sufficient. Beyond four to six months, infants must be given solid foods to supplement breast milk. Despite the importance of breastfeeding and appropriate feeding for preventing malnutrition, only 23 per cent of children under the age of three were breastfed within one hour of birth and less than half the babies (46 per cent) up to five months old were exclusively breastfed. And only 56 per cent of children aged six to nine months received solid or semi-solid food and breast milk. It is, therefore, not surprising that a child typically becomes malnourished between six and 18 months of age, and remains so thereafter. In most cases, nutritional rehabilitation is difficult.

And the fourth clue is found in the limited opportunities available to women. Access to education, for instance, makes a big difference. According to NFHS-3, malnutrition among Indian children below the age of three born to illiterate mothers (55 per cent) is more than twice the levels (26 per cent) reported among mothers who have completed more than 10 years of schooling.

It is also well known that most infants get malnourished between six and 18 months of age. This raises three important issues relating to care of the child. First, six-month-old babies cannot eat by themselves; they need to be fed small amounts of food frequently. Feeding a six-month-old infant, however, is time-consuming. Many rural women simply do not have the luxury of time to feed infants. The task is often entrusted to an older sibling who understandably may not have the required patience to feed an infant. Related to this is the need to care for pregnant women by ensuring proper nutritional diet and by reducing the burden of work on mothers. Child rearing in most families is made the primary responsibility of mothers. It is important for fathers too to recognise their role in child care and share the burden with mothers. And third, it is important for state interventions to focus on care of newborns and those under the age of three.

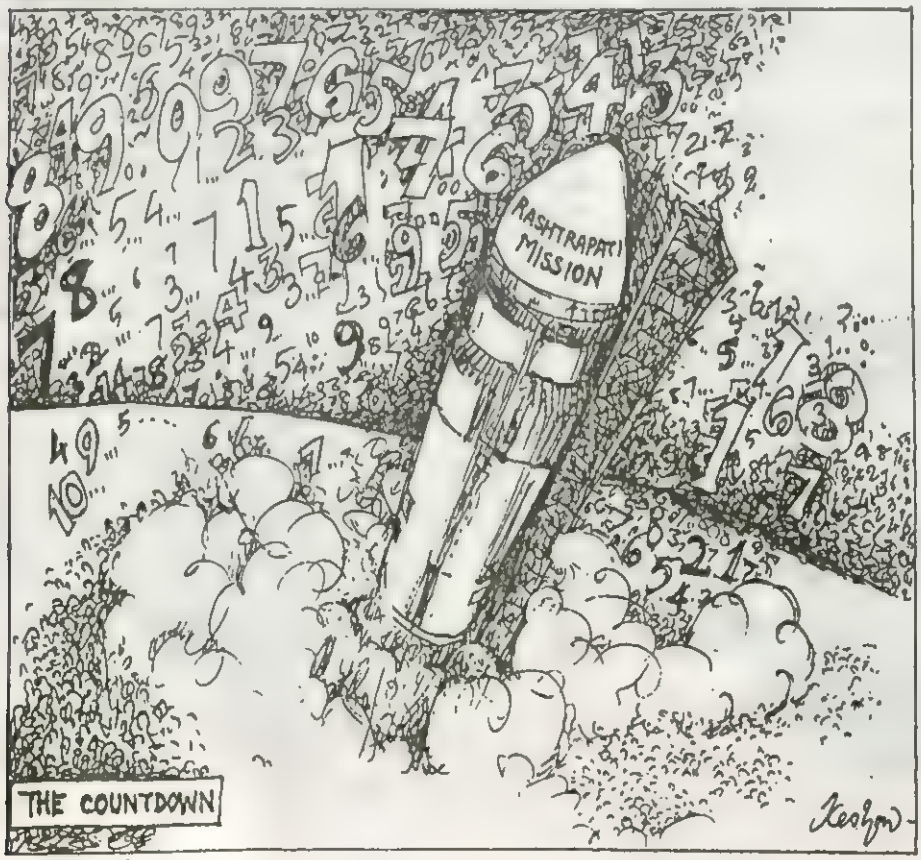
States' records vary

Levels of undernourishment vary widely across Indian States. Punjab, Kerala, Jammu and Kashmir, and Tamil Nadu report the lowest proportions of underweigh children (27 to 33 per cent); whereas Chhattisgarh, Bihar, Jharkhand, and Madhya Pradesh report the highest levels of underweight children (52 to 60 per cent). What explains the better nutritional levels among children in the first set of States? It is not surprising that, by and large, in the four States with the lowest proportion of underweight children, provisioning of health services, care of children especially of newborns, and the nutritional status of women are better than in the four high malnutrition States. For instance, 60 to 81 per cent of children aged six to 35 months were fully immunised in the low malnutrition States, whereas the proportion is much lower – 33 to 49 per cent – in the high malnutrition States. Reach of maternal care services is also poorer in the high malnutrition States. In the low malnutrition States, 63 to 97 per cent of mothers receive at least three antenatal care visits; this proportion varies between 17 and 55 per cent in the high malnutrition States. Again, 53 to 100 per cent of births were assisted by a trained birth attendant in the low malnutrition States whereas in the high malnutrition States the proportion varied between 17 and 55 per cent. And finally, the nutritional status of women is better in States where children had lower levels of malnutrition. For instance, whereas 14 to 24 per cent of women in the low malnutrition States have a BMI below normal, the proportion varies from 40 to 43 per cent in the high malnutrition States.

To conclude, the linkages of child malnutrition with women's health and well-being are strong. Reducing child malnutrition requires enhancing women's freedoms and promoting gender equality. At the same time, the focus has also to shift from enhancing incomes and food availability to understanding how members of a household establish command over food, health, and care. It is important to understand how family members acquire and apply knowledge on child caring and rearing practices, allocate time to look after children, and protect the cleanliness of the environment. But, above all, India's high levels of child malnutrition reflect the continuing neglect of health, the inadequate reach and efficacy of health and child care services, and the failure of strategies to reach newborn children and those under the age of three. These deficiencies need to be addressed immediately.

(The writer is a development economist who has focussed on poverty and human development, and social sector analysis.)

CARTOONSCAPE



Alarm in Uttarakhand over declining sex ratio

Sunil Kumar | Dehradun

12 JUN 2007 PIONEER

Uttarakhand, known for girls with beauty and brain, would no more hold such glory because of the declining sex ratio. Now the State has come down to the seventh position in the declining sex ratio chart. Female sex ratio is above the national average but that under the age of six years has declined drastically. If this trend is not checked then Uttarakhand's youth will have to look for brides from other States like Punjab and Haryana.

Recently, Bhuvneshwari Mahila Ashram and Plan Swaichhik Sangathan along with the Uttarakhand Government had organised a seminar to discuss the declining sex ratio in the State, especially under the age of six years. At the seminar booklets were distributed claiming that people in the hilly areas had been killing girl child in womb. The booklets cited this as the reason for the falling female child sex ratio. Now Uttarakhand, known as God's land, has come down to the seventh rank in the declining sex ratio after Punjab, Haryana, Himachal Pradesh, Delhi, Gujrat and Chandigarh.

While addressing the participants of the seminar, State Health Minister Dr Ramesh Pokhriyal Nishank said, "education levels of the people have gone up but the female child sex ratio has gone down. I myself was born in the hilly district of Uttarakhand but I had not even heard of female infanticide while I was living there. I heard this word when I came to urban areas."

"Mother is more responsible for this because without her consent or that of mother-in-law nothing can happen in a family. So social awareness can play a crucial role in checking the declining female child sex ratio than any law," Nishank added.

But women organisations differed. They allege that Pre Natal Detection Test Act is not being implemented properly by the State Health department and this is why such practices are in use in hilly areas.

According to sociologists, earlier such practices were prevalent in plain areas but now it is prevalent in the hilly areas of Uttarakhand. They also alleged that it all happened due to the presence of mushrooming Ultra Sound centres in the hilly areas. They are luring people by asking them to invest Rs 2,500 now and save at least Rs 10 lakh in future. These areas have witnessed significant progress in the field of education and urbanisation but female child sex ratio has declined alarmingly. This means education and urbanisation are responsible for the phenomenon.

According to Census 2001, 908 females were found per thousand males while female child sex ratio was alarmingly low in all the 13 districts of Uttarakhand.

Pithoragarh, Pouri, Dehradun, Haridwar and Tihri have registered a declining sex ratio by 40 marks as against Census 1991. In 22 blocks sex ratio was found below the national average of 933. These blocks are Narendranagar (899), Dehradun (875), Rishikesh (875) Srinagar (861), DD Hat (896), Pithoragarh (855), Haldwani (891), Kashipur (898), Roorkie (856), Haripur (879) and Laksar (733). If this trend is not checked then the consequence will be severe.

In the 2001 census, female sex ratio in eight districts was more than the national average and below that of Kerala. These districts were Chamoli (1,017), Rudraprayag (1,117), Tihri (1,051), Pouri (1,104), Pithoragarh (1,031), Champawat (1,024), Almora (1,147) and Bageshwar (1,110). Despite this high figures female child sex ratio is alarming in these districts. If this trend continues then the social repercussions would be severe, warn sociologists.

THE TIMES OF INDIA, NEW DELHI
SATURDAY, JUNE 16, 2007

City unsafe for unborn girls

'Service Providers', Educated Delhiites Party To Female Foeticide

Abantika Ghosh | TNN

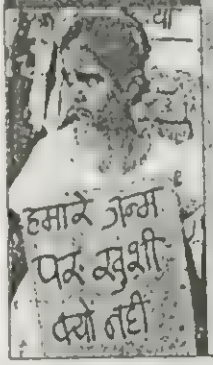
New Delhi: Gurgaon's aborted foetuses may have brought the problem of female foeticide once more into the limelight but the problem is hardly a unique one for Haryana. At 838 girls for every 1,000 boys in the 0-6 age group, the Capital's sex ratio is way below the national average of 927, which again is considerably below the minimum "acceptable" WHO prescribed ratio of 950.

And what is even more worrying is that a look at the district-wise sex ratios of Delhi clearly shows that urban areas like Preet Vihar, Vasant Vihar, Defence Colony and Punjabi Bagh are worse off than their rural counterparts, which would mean that education or affluence are no deterrents. According to NGOs working in the field, the dipping sex ratio is one of the "side effects" of the success of family planning programme. "Among the hip set, it is uncool to have more than two kids, so it is important that one or both are boys. So they cannot take chances. The easy option is foeticide," said an NGO official.

In a recent letter to the chief minister, deputy chairman of planning commission, Montek Singh Ahluwalia, had expressed concern about the dismal sex ratio in the city and advocated "concerted action, perhaps in mission mode, so that the target of 890 at the end of the Eleventh Plan is exceeded..."

SEX RATIO AND THE CITY

Although the Pre-natal Diagnostic Techniques Act has been implemented, there has to be a change in the [illegible] of people [illegible] 2001 that some of the richest colonies of the city fare the worst in terms of sex ratio



Area	Boys below 6	Girls below six	Sex ratio
Punjabi Bagh	46,947	39,566	842
Rural	7,211	6,160	854
Urban	39,736	33,406	840
Patel Nagar	77,364	67,143	867
Rural	1,103	1,034	937
Urban	76,261	66,109	866
Vasant Vihar	37,577	32,297	859
Rural	3,245	2,879	887
Urban	34,332	29,418	856
Defence Colony	40,285	35,653	885
Rural	578	571	987
Urban	39,707	35,082	883
Preet Vihar	69,170	60,766	878
Rural	608	540	888
Urban	68,562	60,226	780
Hauz Khas	81,577	71,965	882
Rural	9,304	7,831	841
Urban	72,273	64,134	887
Kalkaji	55,579	49,882	897
Rural	5,387	4,887	805
Urban	50,192	44,995	896
Delhi	10,79,618	93,7231	868
Rural	85,484	72,676	850
Urban	9,94,134	8,64,555	869

(All figures indicate number of girls per 1,000 boys)

Nevertheless, for those willing to spend the money, which is not too much in any case — an ultrasound can cost Rs 1,500 to Rs 2,500, followed by abortion for a measly Rs 5,000 to Rs 8,000 — there is hardly dearth of willing "service providers" in the city who will nip the girl child in the bud. And the results of ultrasound are never conveyed in writing — the language used is usually, "it is not what you think/want" and the next step is easier still, "go to XYZ doctor. He/she is very good. Your job will be done".

In fact, in the medical circles of the city, the sudden spurt in demand for postgraduate degrees in radiology is often explained by the presence of these "clinics" that continue to operate surreptitiously.

There is a legal framework in place. The Prenatal Diagnostic Techniques (PNDT) Act, 1994, makes conducting a foetal sex selection test a punishable offence. The person who gets it done is liable to be charged with abetment. Thanks to the tardy judicial process in the country, however, in the more than a decade since the Act was framed, there are 70 ongoing cases in the city but no punishment has been pronounced in any.

Says principal secretary (health) D S Negi, "The chief district medical officers (CDMO) in each of the nine districts are responsible for carrying out raids and regular inspections of around 2,000 clinics which have registered ultrasound machines. Raids are conducted only when complaints are received and this being a social problem, that hardly ever happens." He feels the allocated manpower of about three to four people per district is enough, but there is a problem of coordination.

"The CDMO is a medical person. But liasoning with police and prosecution takes a lot of time. About six months back, Union government was petitioned to change the rules so that the SDM is made responsible for coordination," Negi added.

> In a recent letter to the CM, Montek Singh Ahluwalia advocated 'concerted action so the target of 890 at the end of the 11th Plan is exceeded'

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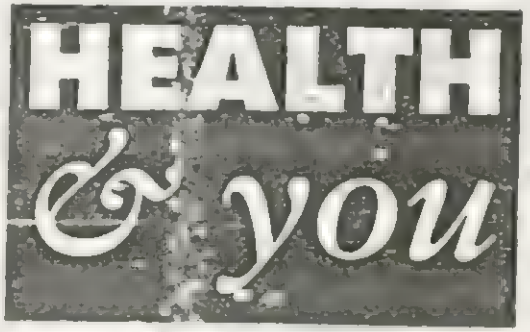
Iron overdose during pregnancy is harmful

7/6/07 DC

Tehran: Iron overdose during pregnancy could be harmful, according to an Iranian university study.

Iron is often given to combat anaemia in pregnancy but many women take extra iron. Anaemia is a condition where the blood is unable to carry enough oxygen due to low number of red blood cells or because each red blood cell is unable to carry normal amounts of oxygen. Common symptoms of anaemia include feeling tired, fainting, or breathless.

The condition is often associated with low birth



weight and premature birth but this does not mean that women should be popping iron pills or any vitamin pills indiscriminately, the study, published in the *British Journal of Obstetrics and Gynaecology* said.

The researchers at Tarbiat Modarres University checked the effect of iron supplements on women whose red blood cell level was normal. They gave 370 women a 150mg dose of ferrous sulphate, which is equal to approximately 30mg of iron, every day throughout their pregnancy. A similar number of women were given a placebo or dummy pill containing no iron.

The number of women with high blood pressure, a disorder that can also cause problems for the mother and child, was higher in the women given the iron pills than in the other group, according to online edition of *BBC News. (IANS)*

Fighting AIDS menace in the workplace

FINANCIAL EXPRESS

23 JUN 2007

Indian corporate houses are taking a leading role in creating awareness among their employees

Monalisa Sen

AMONG the emerging nations, South Africa and India are the hardest hit by the scourge of AIDS. It took India a long while to acknowledge that it is indeed a contagion that needs to be fought and curbed. However, now Corporate India that has been in many ways been hit by this menace—a large number of AIDS' victims include infected truckers who deliver goods—is gearing up to join the fight against HIV/AIDS. UNAIDS calculates that South Africa has somewhere between 4.9 million and 6.1 million, and India between 3.4 million and 9.4 million, although National AIDS Control Organisation (NACO) estimates that there are 5.2 million HIV infected people in India.

Large Indian corporate houses including ACC Ltd, Apollo Tyres Ltd and Ballarpur Industries Ltd have already taken the lead under the auspices of Confederation of Indian Industries (CII) to battle the dreaded virus. These companies have committed themselves to setting up anti-retroviral centres (ART) across the country to treat the infected population.

The private sector is much better placed than most to fight the epidemic because of its influence with employees and due to its network with the wider business community.

In India, the high-risk groups include sex-workers and their clients—especially truckers. In the northeast, the disease is spread more often than not through injectible needles and the use of intravenous drugs.

According to the national programme officer, National AIDS Control Organisation (NACO) and senior physician, Ram Manohar Lohia Hospital, Dr BB Rewari, one-third of all AIDS cases in India is amongst people in the age group 15 years-29 years. Citing a study published by NACO, he said of the estimated 5.2 million HIV infections in India today, 57% are in the rural area, 39% are among women, and 40% are among youth in the 15-35 age group.

The role of corporate social responsibility cannot be undermined and interventions in the workplace can help reduce levels of HIV/AIDS infection. Says Gautam Thapar, chairman, Ballarpur Industries Ltd, "The management of BILT acknowledges the seriousness of the HIV/AIDS epidemic in India and the significant impact it could have at the workplace. We believe in promoting a healthy work environment for our employees. The policy reiterates our commitment in creating a healthy workplace through integrating HIV/AIDS prevention efforts in our existing welfare policies."

The company started a project on healthcare and HIV/AIDS prevention in all its six manufacturing units across four states, located in remote part and having a large migratory population. Maharashtra and Andhra Pradesh where it has four units have high prevalence with regards to HIV/AIDS among general population.

Its project was launched with part-funding from the International Finance Corporation—the private sector investment arm of the World Bank, and technical support from International Labour Organisation (ILO), NACO and State AIDS Control Societies. In two years the project aims to reach out to 15,000 employees from management to casual and contractual workers, and about 10,000 truck drivers and cleaners.

Meanwhile the chief mentor, CII, Tarun Das says, "The Confederation of Indian Industries took on the mandate of catalysing industry's involvement in India's social development agenda in the early '90s. The HIV/AIDS (prevention) programme was started in 1996." According to a CII survey, employees in IT companies are at increased risk of impulsive behaviour, which make them vulnerable to HIV/AIDS. Changing lifestyles also contribute to increased employees' exposure to HIV/AIDS.

"With CII coming forward with access to care and treatment project, we are now planning a number of Anti Retroviral Treatment (ART) centres soon. This year we plan to establish an ART centre at Ballarpur for employees and communities," adds Thapar.

Is there enough awareness about the epidemic? Says Harshita Pande, head, corporate social responsibility, Apollo Tyres, "Apollo is primarily working in the area of awareness generation and prevention, amongst our employees, external stakeholders and customers." Taking the AIDS awareness programme forward, Apollo Tyres in partnership with ILO has chalked out a comprehensive workplace programme on HIV/AIDS focusing on employees and the trucking community. The company believes that awareness generation is the most effective way to curb the rapid prevention of the virus. Meanwhile, cement major ACC Ltd has a workplace policy, which guarantees and safeguards the fundamental rights of employees affected by this virus, while providing them with care and treatment. "It is one of the first companies in India to establish an ART centre for the treatment of persons affected by HIV/AIDS," says R Nand Kumar, CSR, ACC Ltd.

Located outside ACC's Wadi Cement Works in Gulbarga district in Karnataka, the centre provides voluntary counseling and testing and free treatment including free supply of anti retroviral drugs. The company has entered into a partnership agreement with the Christian Medical College (CMC), Vellore to help combat HIV/AIDS virus through an ART centre in Tamil Nadu.

Says Dr Dilip Mathai, professor and head, department of internal medicine, CMC, "CMC has trained the staff at the Wadi ARV Centre. Steel major Tata Steel is also an active partner in this cause. Workplace programmes are conducted regularly with the help of human resources personnel for both permanent employees as well as the contract labour, which helps sensitise employees and reduces stigma and discrimination."

AIDS awareness is crucial and companies know it. "About 250 AIDS awareness programmes are conducted every year in the workplace. Initially, AIDS awareness programmes were started at the workplace and subsequently extended to the community and secondary stakeholders," says a spokesperson of Tata Steel.

Meanwhile, to combat the spread of AIDS amongst truckers in India, Transport Corporation of India Foundation (TCIF) which has access to half a million truckers is working with a five year grant from Avahan—the Indian arm of the Bill and Melinda Gates Foundation. "We may soon set aside a corpus of our own, which will become part of our annual budget for this purpose," says D P Agarwal, vice chairman and managing director, TCIF.

Charity may not be the key motivator with corporate houses since HIV/AIDS affected employees cost the company in terms of loss of productivity. It is in their interest to take the issue to maintain a healthy and productive workforce.

Recently, SRF Ltd—the manufacturer of technical textiles, fluoro-chemicals, packaging films and pharma chemicals, implemented a formal HIV/AIDS policy in collaboration with the ILO, according to a company spokesperson.

Meanwhile, France which has had a long history in fighting AIDS is no exception. With close to 300 French companies in India, employing more than 45,000 people, the French are a concerned lot. In order to mobilise the corporate sector including the subsidiaries of foreign companies, the French Embassy and UNAIDS jointly organised a meet of CEOs of a large number of French companies—Alcatel, Air Liquide, Carrefour, EADS, Safran India, Societé Generale, ST Micro, Suez, Taj Hotels and Veolia—to raise awareness about the role of the private sector in the AIDS response.

The French ambassador, Dominique Girard, says, "Building awareness of the severity of the impact of AIDS on business is one of the most important elements in assisting businesses to respond effectively. The idea is to spread information, educate employees and ensure non-discrimination in the workplace, and ultimately remove the stigma associated with a HIV positive person."

The Indian workplace may finally become more aware of the importance of fighting AIDS. Dr Denis Broun, country coordinator, UNAIDS India says "Public private partnership response to AIDS is one of the hallmarks of the phase three of the National AIDS Control Programme. The need for HIV prevention in the workplace is important, especially in emerging markets like India where public resources are constrained. Working through the private sector to prevent HIV is effective, cost-efficient and sustainable."

Increasing access to HIV testing

The new WHO/UNAIDS guidelines increase the chances of HIV detection

= 7 JUN 2007 HINDU

R. PRASAD

- Onus of getting tested is shifted from individuals to the health-care provider
- Rapid HIV test would be the best option when increasing access to all health centres

BELIEVE IT or not, nearly 80 per cent of people in low and middle income countries seem to be just unaware that they are infected with HIV.

Not that everyone in the developed countries is aware of his/her status. That about 2.5 lakh people living in the U.S. are ignorant of their HIV positive status indicates that not everything is fine with the current detection and prevention strategies.

Keeping this ignorance in mind the Atlanta based Centers for Disease Control and Prevention had last September recommended that all patients in all health-care settings be tested for HIV. Of course, the CDC had made it clear that the testing can be done only with the consent of the individual.

The guidelines

The WHO and UNAIDS have very recently come out with similar guidelines to expand access to HIV testing to ensure that more people are detected.

And by stating that, "many opportunities to diagnose and counsel individuals at health facilities are being missed," the world bodies have come out with revised guidelines to tackle the problem. They have recommended that the HIV testing strategy be changed from the current client-initiated to a provider-initiated one. And by doing so, the world bodies have shifted the onus of getting tested from the individuals to the health care provider.

They have categorised the testing based on the prevalence of the epidemic in a country.

Today, any individual who suspects he/she is infected with HIV has to approach the voluntary counselling and testing centres (VCTC) to get tested.

Increasing detection

While the provider-initiated strategy, which will be available at all health facilities, will greatly increase the detection rate, the option to opt-out gives the individuals the choice of refusing consent to being tested. The centres will also have a facility to counsel individuals.

The high rate of detection in pregnant women due to the availability of testing in nearly all health centres is a typical example.

Any effort to make available HIV testing in more if not all health settings in the developing countries makes it almost mandatory to rely on rapid HIV testing kits.

Rapid tests, besides providing immediate results, are cheaper and require less initial investment. The need for highly trained technicians does not exist.

The gold standard in HIV testing are ELISA and Western Blot. But these two require huge initial investments, are expensive and need highly trained personnel.

Rapid tests have another advantage as well. Since the results are known immediately, the need to come back to collect the results does not arise.

The CDC had recommended rapid tests for the same reason as it found that nearly 30 per cent who tested positive and about 39 per cent who tested negative for HIV did not turn up to collect their results.

But how reliable are the rapid test kits? A paper published in the recent issue of the *British Medical Journal* based on a study of 1,517 males in Uganda looked at the limitations of rapid test. It states that the specificity was low in the three rapid test kits that were used. Low specificity leads to more false positives.

False positives arise when the person tests positive even when he/she is not actually infected with HIV.

The limitations

But false positives when using rapid tests are not peculiar to Uganda. The authors report that high rates of false positives had come up even when they were done in the U.S. They conclude that the problem is not restricted to specific viral subtypes.

They caution that the interpretation of rapid test results is subjective and hence person dependent. The problem of false positive, according to the authors, was more due to over-interpretation of test results.

Samples that showed weak positive bands were interpreted as positives. Retesting showed that these samples ultimately turned out to be false positives.

That the specificity increased when the technicians became cautious in interpreting test results clearly shows that reading the rapid test results is person dependent.

"We in India do not have the problem as NACO guidelines stress on quality of test kits," said Supriya Sahu, Project Director, Tamil Nadu State AIDS Control Society.. "The sensitivity is 99.5 per cent and above and specificity is 98 per cent and above."

The authors of the study recommend retesting a batch of samples using ELISA and Western Blot "to maintain quality control in programmes using rapid tests."

Routine retesting

"We [in Tamil Nadu] do 100 per cent retesting of all samples that test positive and 3 per cent of negative samples," Ms. Sahu stressed. She noted that the negative samples were picked at random.

According to her, of the 10.4 lakh samples tested last year in the State, the number of positives was 33,069 and the number of samples that turned out to be false positives when retested was nil.

India no longer seen as AIDS epidemic leader

Early analysis of a new report suggests it is behind South Africa, and possibly other countries as well.

9/6/07

Donald G. Mcneil Jr.

INDIA, WHICH has been repeatedly accused of denying the size of its AIDS epidemic, probably has millions fewer victims than has been widely believed, according to a new but still unreleased household survey.

The survey was carried out under international supervision with American financing. If it is correct, India is no longer the world's supposed leader — with 5.7 million people infected with the virus, according to the official United Nations 2006 estimate — but is again behind South Africa, which is believed to have more accurate survey results and has an estimated 5.5 million cases, and possibly other countries as well.

Early analysis of the figures suggests that India really has between 2 million and 3 million victims, according to several sources, including American epidemiologists who know the data and the Health Ministry in New Delhi. How the rates are calculated has been a subject of debate, with some experts contending that the rates in many places may be exaggerated.

"Everyone transiting through here says, 'This is a pandemic,'" Union Health Minister Anbumani Ramadoss said in an interview in New Delhi. "But I am very confident that we will not turn into a generalised epidemic."

The lower figure for India would imply that India has managed to keep its epidemic more like that of the United States, in that the virus circulates mostly within high-risk groups. In India's case, these are prostitutes and their clients — especially truckers; men who have sex with men; and people who inject drugs, especially in the northeast, on the borders with Myanmar.

That is exactly what some experts on AIDS surveillance techniques have been arguing for years, saying that Indians do not have the same kind of sexual networks that are common in southern and eastern Africa, in which both men and women often have two or more occasional but regular sexual partners over long periods of time. Also, outside of prostitution, "transactional sex" between teenage girls and older men in return for money, food or clothes is much less common in Asia than in Africa.

James Chin, a professor of epidemiology at the University of California, Berkeley, has made the case that the typical way of estimating AIDS prevalence rates — sampling the blood of pregnant women who come to urban health clinics and the blood of high-risk groups — greatly exaggerates national estimates. Professor Chin has been vindicated by more recent surveys, paid for by the U.S., that take blood samples in randomly chosen households in rural and urban areas.

One of those, called the National Family Health Survey, produced India's new figures. Such surveys, country by country, have led the U.N. AIDS programme, UNAIDS, to slowly scale back its world estimates. "This is a replay of what happened in Kenya," said Daniel Halperin, an expert on AIDS infection rates at the Harvard School of Public Health. When Kenya was more carefully surveyed in 2004, he said, its prevalence rate was halved, to 6.7 per cent from the 15 per cent that UNAIDS had estimated in 2001. But Professor Halperin said that AIDS-fighting agencies had such a stake in portraying the epidemic as an approaching Armageddon that they were hesitant to make revisions.

India's survey was finished last year, but Avahan, an AIDS group financed by the Gates Foundation, refused to discuss the figures before their formal release, which has not been scheduled. "If the total number of cases in the world is half of what you've been saying, that's a bitter pill to swallow," Professor Halperin said. "So every year they lower the numbers a little bit, and retroactively change the estimates of what it used to be. It's sort of Orwellian."

In Africa, infection rates range as high as 30 percent. South Africa's is about 22 per cent, and that figure is considered relatively accurate because the epidemic is older than India's and population surveys have been done. In recent years, several prominent figures have accused India of denying the scope of its AIDS problem, but Indian health officials dispute their conclusions.

Richard Feacham, until recently the executive director of the Global Fund to Fight AIDS, Tuberculosis, and Malaria, said in early 2005, when South Africa was thought to have slightly more cases: "The official statistics are wrong. India is in first place." He warned that India's epidemic could shoot up to African levels, wiping out the surging economy and leaving a nation of orphans.

S.Y. Quraishi, then director of India's National AIDS Control Organisation, took offence, calling such projections "technically incorrect and misleading."

Richard Holbrooke, president of the Global Business Coalition on HIV/AIDS, said in a 2006 interview that contentions by Indian leaders that their country would not follow Africa were simply not true and compared their political courage unfavourably to that of China's leaders. And in 2002, when Bill Gates visited India to donate $100 million to fighting its epidemic, Shatrughan Sinha, then the Health Minister, accused him of "spreading panic among the general public" by suggesting that cases could reach 25 million by 2010.

Asked if he felt India was owed any apologies, Dr. Ramadoss said he wanted only "that the world acknowledge the efforts India is making."

"India is glaringly not in a denial phase," Dr. Ramadoss said, adding that he was grateful for the pressure from critics because it had forced the country to move faster. "We need to work with the Global Fund, not contradict each other."

Anjali Gopalan, executive director of the Naz Foundation (India) Trust, which runs an orphanage and fights stigmatisation of AIDS victims, said she was sceptical of any estimate as low as 2 million. But whatever the figure turned out to be, she said, "The infection is here, and we have a huge burden." She added, "We are a very sexually active culture, contrary to what the politicians want to project."

AIDS still conveys tremendous stigma in India. In recent weeks, newspapers have carried reports of an AIDS patient left on the street outside a hospital to die, of five infected children expelled from school, and of a woman beaten to death by her in-laws who feared she would infect the family. —New York Times News Service

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Naco's new initiative for drug users

20 JUN 2007 THE TIMES OF INDIA, DEL

Kounteya Sinha | TNN

New Delhi: In the first initiative of its kind, intravenous drug users (IDUs) in India will officially get Bupernorphin (the most common drug of abuse by addicts) and syringes from the government itself from next month.

According to the National aids control organisation (Naco), while clean syringes will help reduce the risk of getting infected with HIV through sharing needles, Bupernorphin will help them get over hard substances like heroin and cocaine.

Naco chief K Sujatha Rao is on trip to China to study how to formulate, plan and implement the oral substitute therapy (OST) programme.

China has achieved tremendous success with OST. After completing a year-long pilot project, it upscaled its OST programme to 30,000 IDUs in quick time.

At present, India is home to nearly two lakh IDUs. Of these, over 50,800 people are from the north-eastern states. Over 10% of them are HIV positive solely due to sharing of contaminated needles.

Rao told TOI, "Till now, the government only ran detox programmes for IDUs. However, this proved to be a failure with high relapse rates. We have, therefore, decided to implement OST from July itself."

Naco will start the programme in the north-eastern states. By the end of five years, it hopes to have 1.9 lakh IDUs under the programme.

It is also formulating a Bill that will seek to legalise the drug substitution and needle exchange programme.

Rao added, "India is a busy transit route for drug traffickers moving heroin. Inevitably, this has led to a rise in substance addiction here.

Denying this fact any longer would be disastrous for the country's AIDS control programme, especially because drug addicts are at a higher risk of contracting HIV through sharing needles."

Under the programme, addicts will first be asked to exchange their syringes with safe needles by former addicts, from drop-in points on streets and clinics that will be five minutes away from injecting zones.

They will then be put under the six-nine month-long OST programme in which substance abusers will keep an oral pill of Bupernorphin called Addnock under their tongue for five minutes everyday in front of a supervising doctor. This will cut their desire for addiction. This strategy has worked in China, USA, Holland, Germany and Australia.

In cities where needle and syringe exchange practices have been introduced, the rate of HIV infection among injecting drug users was an average of 6% compared with an average 21% in cities where the programmes had not been introduced as yet.

POINT OF CONCERN

"Drug addicts are at a higher risk of contracting HIV through sharing needles"

K Sujatha Rao | NACO CHIEF

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New AIDS cases outpace treatment gains

If current trends persist, sub-Saharan Africa could have 36 million new infections by 2015.

Sharon LaFraniere

FOUR YEARS ago, the region surrounding the dominant seaport of Beira, Mozambique's second-largest city, offered hardly any AIDS-prevention advice to pregnant women. Today two dozen health clinics give mothers-to-be HIV counseling, tests and medicine to protect their newborns from catching the virus.

Clinic workers persuade four in five women to be tested, and one in ten tests comes back positive. Last year alone the clinics identified 5,018 women who were poised to pass HIV to their babies.

Beira might be regarded as a beachhead in Africa's effort to halt the spread of AIDS, but for one fifth more than half of those women never returned to the clinics for medicine to limit the risk of transmitting HIV to their children.

"After the test, the problems start," said Alberto Baptista, the provincial health director. "We lose a lot of women."

There is a bright side to sub-Saharan Africa's war on AIDS: hundreds of thousands of infected people once doomed to die are now receiving life-saving treatment. Fully 28 per cent of those who need drug treatment get it, compared to just two per cent in 2003. But Beira represents the less-noticed stubborn umbra — the pandemic's continued spread. For each sub-Saharan African who was placed on anti-AIDS drugs last year, experts say, five more were newly infected. The region's rate of new infections has not budged since the late 1990s, experts say.

If current trends persist, sub-Saharan Africa, already reeling under the burden of nearly 25 million infected people and in the midst of a population boom, will face another 36 million new infections by 2015, according to a report to be released this June by the Global HIV Prevention Working Group. Treatment clinics will confront an ever-growing clientele and countless millions will die, said the panel of experts, which was convened by the Kaiser Family Foundation and the Bill and Melinda Gates Foundation.

"It is like running on a treadmill," said Salim S Abdool Karim, who directs the Centre for the AIDS Programme of Research in South Africa. "The faster you run, the more you stay in place."

The panel blamed the lack of an intensive prevention effort for the continuing high rate of new infections. To some extent, the panel said, prevention has taken a back seat to treatment in the last several years. Developing nations were spending progressively less on prevention programmes, the report said. Studies show donors are gravitating toward financing treatment over prevention.

"Despite their promise, HIV prevention efforts have received short shrift in the global HIV response," the report says.

That is partly because treatment programmes produce tangible, dramatic evidence of money well spent, while an averted infection is almost impossible to show, even though prevention is more cost-effective in the long run, the panel's experts say.

Worldwide prevention programmes reach fewer than one in five persons at high risk of infection, the United Nations AIDS agency estimates. In 2005, $3.2 billion was spent on prevention, $2.5 billion less than what was needed, the agency says.

The working group estimated that a properly financed and executed prevention campaign could reduce the number of global infections in 2015 by nearly two-thirds. "This degree of success would likely disable the epidemic," the report said. One the most glaring examples of flagging prevention, experts agree, is the high percentage of pregnant women who pass on HIV during birth or breast-feeding. Most pregnant women in sub-Saharan Africa visit a health care clinic at least once before giving birth, according to the U.N. AIDS agency. Preventing them from infecting their babies is relatively simple: a single antiretroviral pill called nevirapine — or better yet, a combination of drugs — is given at the onset of labour. The newborn receives nevirapine and other medicine.

Clinical trials showed that these methods can cut the risk of HIV transmission by half, according to the HIV working group. Yet while the mother-to-child prevention programme is growing, it still reaches only 11 per cent of infected mothers-to-be. Last year alone 400,000 sub-Saharan children were infected with HIV, the vast majority by their mothers. "The level of coverage is ridiculously low," said Jose Luzolo Livwa, a senior resource adviser for UNAIDS.

Come from behind effort

In the Mozambican province that includes Beira, the new focus on prevention represents a huge comeback from behind effort. But with just one nurse for each 8,000 residents and AIDS still regarded largely as a humiliation, success is elusive. Last year, only one in 12 mothers-to-be who needed preventive medication in Mozambique received it, the Ministry of Health said.

At Chota health clinic near Beira, a single nurse, Anna Manocua, struggles vainly to keep track of infected mothers while caring for an average of 60 patients a day. How many receive their medication is just a guess. Her handwritten log suggests that at least eight women have missed their drug doses since December. There is no hope of finding them: Ms. Manocua did not record any addresses or cell phone numbers. "I am alone," she said. "I have a lot of work. Last week, when I was sick, there was no one here at all."

Stephen S. Lloyd, the director of Health Alliance International, said the Chota nurse epitomised the problem. His non-profit organisation is trying to jump-start the province's mother-to-child prevention programme. But he said, "it all comes down to the same, single nurse."

Shortages of health care workers are hardly the only problem. For the typical Mozambican woman, the nearest health facility is an hour's walk away. Nearly half of the women in Beira's province give birth without help from a health care worker, who must give anti-HIV drugs to newborns within 72 hours of birth. Breast-feeding is another obstacle. Even infected mothers who have chosen nevirapine tend to ignore the risk of breast-feeding longer than six months because of tradition and a lack of other food, a U.N. report states. Nor is persuading mothers-to-be to take the right steps easy.

At a support group in Nhamatanda, a town of 5,000, HIV-positive new mothers recounted how they followed medical advice and told their husbands they were HIV-positive, with disastrous results. Aida Estefani, 29, said her husband abandoned her mid-pregnancy, telling her "the child will be contaminated also." Rita Louise, who did not give her last name for fear of ostracism, said her husband demanded the police arrest her. Isabel Quembo, 30, said her husband beat her and tore their hut to the ground. He threw out pots, pans, food — and then her.

The husband of Rosa, a 37-year-old mother of twins, stood by her, but her monthly trips to the hospital aroused suspicions among her neighbours, who made her an outcast. "Always when I walk by I hear them," she said. "They speak loudly enough so I can hear them. They say, 'She is a person of AIDS.'" She consoles herself with a grim thought. "Today it is me," she said. "But tomorrow, it can be them."

—New York Times News Service

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THE HINDU

MONDAY, JUNE 25, 2007

A new perspective on HIV and AIDS

The significant downward revision of India's caseload of people living with HIV/AIDS will bring all round relief. The revised figure, based on new estimates, has been arrived at by UNAIDS, the National AIDS Control Organisation, and other agencies using a variety of data sets such as prevalence of infection among pregnant women, drug users injecting with needles, and men having sex with men and the National Family Health Survey. The number of people with HIV/AIDS is now placed between two and three million, while the 2006 estimate was 5.7 million; the prevalence is thought to be confined mainly to high risk groups. The sharply lower estimate (which follows a similar reduction in Kenya) has removed India from the top position among countries with the highest number of HIV positive people. Experts and policymakers who expressed doubts over the high caseload estimates for India are bound to feel vindicated now. Much as this is a welcome denouement in the campaign against AIDS, the positive status of even three million people is a major public health challenge, given the general weaknesses of the government-funded healthcare system, budgetary pressures due to high prices of anti-retroviral drugs, and crucially, the stigma associated with HIV.

The third phase of the National AIDS Control Programme scheduled to run between 2007 and 2012 aims to improve voluntary counselling and testing, antiretroviral treatment, and preventive strategies through integration with national health schemes; it also hopes to scale up community support and advocacy. But the elimination of stigma and discrimination remains a daunting challenge. There are distressing reports of schools denying admission to HIV positive children even in progressive States like Kerala, while discrimination has deprived many patients of their jobs. The lack of state support for those affected is painfully evident. HIV positive individuals have been running a hotel in Ahmedabad to help provide vocational training and even food to those facing discrimination. Many are denied treatment by hospitals if they test positive. Such affected people can only hope that the legislative protection promised by Health Minister Anbumani Ramadoss against discrimination at the workplace and in healthcare and educational institutions will soon be available and enforced with vigour. Much work also needs to be done to ensure universal access to antiretroviral drugs, including the costlier second line medication. Although incremental improvements have been made in ARV treatment, access is far from universal, and children in particular have become the invisible victims of poor coverage.

THE TIMES OF INDIA, HYD

Aids alert: One in 100 positive

India Faces A Grave Situation Despite Low Prevalence Of 0.9%

4 JUN 2007

New Delhi: India might be a low prevalence country for Aids with only 0.9% of the adult population estimated to be infected with HIV. But in numbers, the situation looks grave, with nearly one out of hundred adults in the country being HIV-positive.

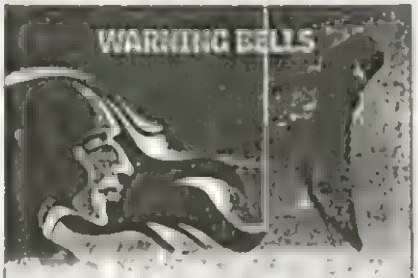
In Bihar and Uttar Pradesh, the task of raising awareness about HIV is especially difficult due to the high proportion of rural population and relatively low levels of literacy. In Bihar, nearly 90% of the population lives in villages while in Uttar Pradesh, the figure is 79%.

A major problem is the literacy levels of women in both states. In Bihar, only one-third of women were literate at the time of the 2001 Census, as were 42% in Uttar Pradesh.

Despite such obstacles, awareness of HIV, how it spreads and ways to avoid it have risen in both states, according to bilingual HIV statistical chartbooks on the situation of HIV/Aids in India (Bihar and Uttar Pradesh) brought out by the Population Foundation of India, New Delhi, and Population Reference Bureau (PRB), Washington DC. The books were released at a seminar organised on Saturday.

According to the charts, testing for HIV prevalence at sentinel sites in Bihar and UP has shown that HIV infection is spreading in the states, although the overall level of prevalence appears to be low at present.

Women are most vulnerable to Aids and yet their knowledge about the deadly disease is abysmally low.



- Illiteracy, lack of awareness among women major obstacle in preventing Aids spread
- Women in most states unaware of the menace, Kerala (95%) and TN (94%) were the exception
- WHO says over 5.7 million of the 8.6 million people with HIV in Asia are from India. While India puts the figure at 5.2 million

India's most scientific survey — the National Family Health Survey III (NFHS III), which for the first time came up with trend data on HIV/Aids-related behaviour — has made some startling revelations. Only 23.9% women in Assam know that consistent condom use can reduce the chances of getting HIV/Aids.

The lack of knowledge is equally shocking in most other states — 24.1% in Meghalaya, 27.2% in UP, 27.3% in Rajasthan, 29.3% in West Bengal, 30.5% in Orissa, 33.5% in Karnataka, 35.7% in Madhya Pradesh, 36.1% in Gujarat, 42.1% in Tamil Nadu, 45.3% in Haryana and 45.4% in Maharashtra.

In several states, women had not even heard of Aids. Only 33.8% in Rajasthan, 40% in UP, 45.3% in MP and 49.3% in Gujarat were aware of the disease.

In West Bengal (50.2%), Haryana (60%), Karnataka (66.4%), Punjab (69.7%) and Orissa (62.1%), the percentage of women who had heard of the disease was slightly higher. Only women in Kerala (95%) and Tamil Nadu (94%) were aware of it to a large extent.

The startling figures revealed by NFHS III explains why a recent WHO and UNAIDS report said that over 38% of those living with HIV in India were women, most of them having acquired the virus from regular partners who were infected during paid sex.

The 2006 Aids epidemic update pointed to unprotected heterosexual intercourse as the main cause behind bulk of the HIV infections in India. Over 5.7 million of the 8.6 million people living with HIV in Asia are from India. Most of them are adults aged 15-49 years. India, however, puts the figure at 5.2 million.

The study, which for the first time provides information on men and unmarried women, found that men in India were comparatively more aware of Aids and knew that consistent condom usage could protect them against the disease.

The percentage of men who knew about the benefits of condom stood at 49.6% in Assam, 56% in West Bengal, 61.9% in MP, 63.2% in Rajasthan, 72.1% in Gujarat and 72.8% in Karnataka.

AIDS figures much lower in India than earlier estimates

– 9 JUN 2007
TIMES OF INDIA DELHI

Donald G McNeil Jr

New Delhi: India, which has been repeatedly accused of denying the size of its AIDS epidemic, probably has millions fewer victims than has been widely believed, according to a new but still unreleased household survey.

The survey was carried out under international supervision with American financing. If it is correct, India is no longer the world's supposed leader with 5.7 million people infected with the virus, according to the official United Nations 2006 estimate, but is again behind South Africa, which is believed to have more accurate survey results and has an estimated 5.5 million cases, and possibly other countries as well.

Early analysis of the figures suggests that India really has between two and three million victims, according to several sources, including American epidemiologists who know the data and the health ministry here. How the rates are calculated has been a subject of debate, with some experts contending that the rates in many places may be exaggerated.

"Everyone transiting through here says, 'This is a pandemic'," Dr Anbumani Ramadoss, health minister, said in an interview here, adding "But, I am very confident that we will not turn into a generalised epidemic."

The lower figure for India would imply that the country has managed to keep its epidemic more like that of the United States, in that the virus circulates mostly within high-risk groups.

In India's case, these are prostitutes and their clients, especially truck-drivers; men who have sex with men; and people who inject drugs, especially in the north-east, along Myanmar's borders.

That is exactly what some experts on AIDS surveillance techniques have been arguing for years, saying that Indian's do not have the same kind of sexual networks that are common in southern and eastern Africa, in which both men and women often have two or more occasional but regular sexual partners over long periods of time.

Also, outside of prostitution, transactional sex between teenage girls and older men in return for money, food or clothes is much less common in Asia than in Africa.

James Chin, a professor of epidemiology at the University of California, Berkeley, has made the case that the typical way of estimating AIDS prevalence rates — sampling the blood of pregnant women who come to urban health clinics and the blood of high-risk groups — greatly exaggerates national estimates.

Professor Chin has been vindicated by more recent surveys, paid for by the United States, that take blood samples in randomly chosen households in rural and urban areas. One of those, called the National Family Health Survey, produced India's new figures. Such surveys, country by country, have led the United Nations Aids programme, Unaids, to slowly scale back its world estimates.

This is a replay of what happened in Kenya, said Daniel Halperin, an expert on AIDS infection rates at the Harvard School of Public Health. When Kenya was more carefully surveyed in 2004, he said, its prevalence rate was halved, to 6.7% from the 15% that Unaids had estimated in 2001.

But Dr Halperin said that AIDS-fighting agencies had such a stake in portraying the epidemic as an approaching Armageddon that they were hesitant to make revisions.

India's survey was finished last year, but Avahan, an AIDS group here financed by the Gates Foundation, refused to discuss the figures before their formal release, which has not been scheduled.

"If the total number of cases in the world is half of what you've been saying, that's a bitter pill to swallow," Dr Halperin said. "So, every year they lower the numbers a little bit, and retroactively change the estimates of what it used to be. It's sort of Orwellian," he says.

In Africa, infection rates range as high as 30%. South Africa's is about 22%, and that figure is considered accurate because the epidemic is older than India's and population surveys have been done. In recent years, several prominent figures have accused India of denying the scope of its AIDS problem, but Indian health officials dispute their conclusions.

Richard Feacham, until recently the executive director of the Global Fund to Fight AIDS, Tuberculosis and Malaria, said in early 2005, when South Africa was thought to have slightly more cases: "The official statistics are wrong. India is in first place." He warned that India's epidemic could shoot up to African levels, wiping out the surging economy and leaving a nation of orphans. S Y Quraishi, then director of India's National AIDS Control Organisation, took offence, calling such projections technically incorrect and misleading.

Richard Holbrooke, president of the Global Business Coalition on HIV/AIDS, said in a 2006 interview that contentions by Indian leaders that their country would not follow Africa were simply not true and compared their political courage unfavourably to that of Chinas' leaders. NYT NEWS SERVICE

AIDS study for 'impulsive' IT men

THE ECONOMIC TIMES

E 4 JUN 2007

Our Bureau

NEW DELHI

THE WORLD Bank Institute (WBI) and industry chamber CII will set up an IT industry forum for HIV/AIDS awareness among IT and ITeS employees. The forum, to be set up shortly, will focus on disseminating knowledge among employees using companies' core competencies to spread awareness and reduce stigma.

According to a CII survey, employees in IT companies are at an increased risk of impulsive behaviour, which makes them very vulnerable to HIV/AIDS. Workplace environment and changing lifestyle also contribute to employees' exposure to HIV/AIDS, the survey said.

Representatives from top IT companies, industry associations and youth networks met through video conference on 'Accelerating Response to HIV/AIDS and Stigma in the IT sector' organised by CII, WBI and Indian Business Trust for HIV/AIDS. The IT sector was represented by Satyam, IBM, Tata Consultancy Services, Intel, Genpact, Firstsource Solutions, Reliance Industries and ZMQ Software Systems.

Satyam Foundation lead partner Sashi Kumar said information on HIV/AIDS should be introduced at the entry level as part of the induction programme. He shared Satyam's programme of formation of Red Ribbon Clubs, talk shows and competitions on the topic to create awareness among employees. Messages on HIV/AIDS have to be clear and consistent and an integrated approach towards long-term commitment can raise awareness on the issue of HIV/AIDS, Mr Kumar said.

WORKPLACE ENVIRONMENT & CHANGING LIFESTYLES CAN EXPOSE EXPLOYEES TO AIDS: CII

ZMQ Software Systems CEO Subhi Quraishi presented various innovative mobile phone games and interactive games on HIV/AIDS that his company has developed. The HIV/AIDS awareness package created by ZMQ is an interactive tool that has covered 300 NGOs and 1,200 schools. IT companies' workforce has a majority of youngsters who need to be informed on HIV/AIDS, said CII chief mentor Tarun Das.

Indira Sandilya of Indian Business Trust for HIV/AIDS said about 5.2 million people are HIV/AIDS-infected in India, with 90% of those in the productive age group of 15-49.

Central prison gets HIV- testing centre

26 JUN 2007 DECCAN HERALD

By Bala Chauhan
DH News Service

BANGALORE: The Central prison at Parappana Agrahara has acquired a voluntary counselling and testing centre (VCTC), with the help of Karnataka State AIDS Prevention Society (KSAPS).

The brainchild of Additional Director General of Police and Inspector General of Prisons S T Ramesh said the VCTC is likely to become operational from Tuesday.

"The facility is ready; we have received the equipment. A counsellor and lab technician have also been posted at the centre. We are only waiting for the testing kits to arrive. They are expected by Tuesday. The counselling at the centre has already started," said Mr Ramesh.

According to KSAPS sources, the testing kits are available and the prison authorities can obtain them any time.

Speaking to *Deccan Herald*, Dr Shashikala, Dermatologist and Nodal Officer for Karnataka Prison (HIV/AIDS) said, there are 13 HIV afflicted prisoners at the Central prison . All of them are males. We have four inmates with full blown AIDS. The latter are getting anti-retroviral therapy from Bowring Hospital. The response to counselling at the VCTC has been encouraging, she added.

Mr Ramesh had requested KSAPS to set up a VCTC in the prison on February, this year. "We are very impressed with the comprehensive AIDS control programme in the Andhra Pradesh prisons. I want to replicate the model in Karnataka prisons. The facility will cater to the requirement of the entire prison population in Karnataka," said the officer.

"There was a dire need for a VCTC at the Central prison. We get prisoners with HIV and it becomes difficult to send them to Bowring Hospital for tests. The 'centre' has come to us as a veritable boon," he added.

Condom Box: The prison authorities have also gone a step further and put up a condom box outside the prison, for the use of prisoners, who are either released or are going out on parole. "They meet their families after a long time and sex is a natural desire. We hold health education programmes in the prison to educate them on safe sex. The box was set up last week. Some prisoners are making use of it," said the doctor. There are plans to establish similar VCTCs at the remaining six central prisons in the State.

Guntur hospital successful in HIV prevention

DECCAN CHRONICLE 11 JUN 2007

By MOHAMMED AMEEN

Guntur, June 10: The obstetrics and gynaecology department of the General Hospital here has been successfully preventing transmission of HIV infection from mothers to newborn babies.

This prevention programme was introduced in the hospital in May 2002 and is being run with the help of the UNICEF, National Aids Control Organisation and Andhra Pradesh Aids Control Society.

As part of the programme, doctors have administered Niverapine to 1,125 HIV-infected mothers and their newborn babies during the last five years.

More than 90 per cent of the children who were given the medicine are safe.

Dr C. Vasanth Kumar, who leads the team of gynaecologists, said that the drug kit cost only Rs 113.

"By administering the medicine and by taking proper care to ensure a safe delivery, we have been preventing transmission of HIV," he added.

Of the 221 children administered with the Niverapine syrup after their birth recently, only 21 children tested HIV positive after 12 months.

Pregnant women affected by HIV will be given Niverapine tablets after they start getting labour pains while the infants will be administered the syrup within 72 hours of the delivery.

The first 'safe delivery' was made on May 1, 2002 and the doctors administered the medicine to the 1,000th woman on March 11, 2007.

"Initially, it was difficult to persuade women to undergo HIV tests, but gradually they have realised the need for the tests," said Dr Vasanth Kumar.

"Now more than 99 per cent women are giving their written consent for this," he added.

HIV count not as high as touted

THE HINDUSTAN TIMES

Continued from page 1

UNAIDS has had to revise its estimates in the past. A 2004 recount in Kenya led to its HIV prevalence halving - from UNAIDS's 2001 estimate of 15 per cent to 6.7 per cent.

International agencies have consistently accused India of playing down its AIDS data.

A UNAIDS report in 2002 showed over 3 lakh AIDS deaths in India in 1999, when the number of recorded deaths was 11,000. In 2002, the US Intelligence Community Assessment (ICA) claimed India was likely to have 20 to 25 million HIV positive people by 2010. Last year, UNAIDS said the number was 5.7 million,half a million more than NACO's estimate of 5.2 million.

This time, with international experts on board, India is hoping to put the controversy to rest.

International agencies have consistently accused India of playing down AIDS data.

– 9 JUN 2007

Peter Berman, economist at the World Bank, said, "We should endorse the new data. But whatever the lower numbers are, there is no reason for complacency."

On whether this would affect the hundreds of crores in funds committed by international donors for the third phase of the National AIDS Control Programme, he said, "I don't see any sign of that happening yet."

(With inputs from Amitava Sanyal)

HIV positive kids denied admission

DECCAN HERALD

DH News Service

THIRUVANANTHAPURAM: Five HIV positive children living in an orphanage in Kottayam have been denied readmission to a private school in the new academic year for fear of backlash from parents of other students.

The children aged between 5 and 11 years, had arrived at the Mar Dionysius Lower Primary School at Pampady in Kottayam on the reopening day on Monday but were turned back at the gate.

As reported, it was an unsuspecting media report about an AIDS day function in December last year in Kottayam which revealed the identity of the children.

Parents of other children of the school were immediately up in arms and threatened to pull out their wards if they had to sit with the HIV positive children.

Following this, the children, five girls and a boy, had to leave the school. A protracted war had been continuing between the school authorities and the government ever since.

Education Minister M A Baby and Opposition leader Oommen Chandy had made a vain attempt to bring other parents and guardians to a negotiated settlement.

Later, the school authorities arranged private training for the children and also allowed them to write the annual examination. All the five children passed the examination.

The Asha Kiran Orphanage authorities were hoping that the school would re-admit the children this year when the new turn of events occurred.

The children would now continue to receive special coaching from teachers attached to the school at the Orphanage.

HIV test law is against WHO rules

DECCAN CHRONICLE
- 3 JUN 2007

By OUR SPECIAL CORRESPONDENT

Hyderabad, June 2: The State government's attempt to make pre-marital AIDS tests compulsory for couples goes totally against new World Health Organisation guidelines.

WHO has asked member nations not to compel people to test for HIV and has stressed that such tests should only be done voluntarily.

The State government was planning to enact legislation making AIDS tests compulsory before marriage. But this has become doubtful now, since it will violate international health laws.

BOTTOMLINE

The guidelines released jointly by WHO and UNAIDS on May 30 state that testing must be "voluntary, confidential and undertaken with the patient's consent".

They prohibit governments from going forcing compulsory tests on unwilling people or patients.

It was the previous Telugu Desam government which mooted the idea of compulsory AIDS tests for couples before marriage. But it had to back off following protests from human rights groups. The Congress government then picked up the gauntlet and decided to legislate in the "larger interests of society".

A draft bill has been readied and Chief Minister Y.S. Rajasekhar Reddy is reportedly keen on enacting it.

Significantly, an attempt by the Goa government to come out with a similar legislation failed because of large-scale protests. As per the new WHO guidelines, patients have the right to refuse to take a test.

"Nobody should be tested for HIV against their will, without their

■ Turn to Page 2

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HIV test law

Continued from Page 1

DECCAN CHRONICLE

knowledge or without adequate information," say the guidelines. Moreover, governments have to provide patients with support to deal with the consequences of knowing and disclosing their HIV status, such as discrimination or violence.

State AIDS Control Deputy Director Ch Prabhakar said there should be more focus on creating awareness before moving ahead with any legislation.

3 JUN 2007

AIDS

Clipping

Low HIV prevalence in India despite highest AIDS death rate

Pioneer News Service | New Delhi 14 JUN 2007 PIONEER

India is a low prevalence country as far as cases of HIV infected cases are concerned with an estimated 0.9 per cent of adult population estimated to be infected with this disease. However, it means one out of every 100 adults is HIV positive.

This observation has been made by a chartbook released by The Population Foundation of India (PFI), New Delhi, and Population Reference Bureau (PRB), Washington DC.

The two NGOs released bilingual statistical chartbooks on the situation of HIV/AIDS in India in a seminar in New Delhi on Sunday.

However, according to UNAIDS Report on the Global AIDS Epidemics, the figure of estimated AIDS deaths in India was over 4 lakh in 2006. This number is the highest in the world. South Africa had an estimated figure of about 3.2 lakh AIDS death for the same period.

The three chartbooks also focussed on the HIV situation in Bihar and Uttar Pradesh.

Dr Abid Hussain, member Governing Board, Population Foundation of India chaired the seminar. Others present on the occasion included Dr Denis Broun, Country Coordinator, UNAIDS, India; AR Nanda, Executive Director, Population Foundation of India and Carl Haub, senior demographer, Population Reference Bureau, Washington DC. Officers from State AIDS Control Societies of Bihar and Uttar Pradesh also participated in the one-day event.

In both Bihar and Uttar Pradesh, the task of raising awareness of HIV is especially difficult due to the high proportion of rural population and relatively low levels of literacy. In Bihar, nearly 90 per cent of the population lives in villages. In Uttar Pradesh, the same figure is 79 per cent.

Moreover, a particular problem is the literacy levels of females in both States. In Bihar, only one-third of females was literate at the time of the 2001 Census, as were 42 per cent in Uttar Pradesh.

However, despite such obstacles, awareness of the existence of HIV, how it spreads and ways to avoid HIV has risen in both States, as has been shown in surveys.

Testing for HIV prevalence at sentinel sites in Bihar and Uttar Pradesh has shown that HIV infection is spreading in the States, although the overall level of prevalence appears to be low at present. But, districts with higher HIV prevalence, often referred to as "hotspots," have made their appearance in both States.

These bilingual publications are intended to present the facts of HIV/AIDS in a clear and concise format for the use of NGOs, journalists, those who work in the field of HIV and who require a quick reference to facts about HIV in India.

Move to stem HIV among addicts

TIMES OF INDIA DELHI 21 JUN 2007

Govt To Supply Syringes, Oral Drug To Reduce Risk Of Infection From Needles

Kounteya Sinha | TNN

New Delhi: In the first initiative of its kind, intravenous drug users (IDUs) in India will officially get Bupernorphin (the most common drug used by addicts) and syringes from the government itself from next month.

According to the National Aids Control Organisation (Naco), while clean syringes will help reduce the risk of addicts getting infected with HIV through sharing needles, Bupernorphin will help them get over hard substances like heroin and cocaine. Naco chief K Sujatha Rao left for China on Tuesday evening to study how to formulate, plan and implement the Oral Substitute Therapy (OST) programme.

China has achieved tremendous success with OST. After completing a year-long pilot project, it has upscaled its OST programme to 30,000 IDUs in quick time. At present, India is home to nearly two lakh IDUs. Of these, over 50,800 people are from the north-eastern states. Over 10% of them are HIV positive solely due to sharing of contaminated needles.

EMULATING NEIGHBOUR: China has achieved success with OST

Rao told TOI, "Till now, the government only ran detox programmes for IDUs. However, this proved to be a failure with high relapse rates. We have, therefore, decided to implement OST from July itself."

Naco will start the programme in the north-eastern states. By the end of five years, it hopes to have 1.9 lakh IDUs under OST.

It is also formulating a Bill that will seek to legalise the drug substitution and needle-exchange programme. An official added, "Large scale drug substitution isn't still legal in India. So we are working on a Bill. However, according to the NDPS Act, such drugs can be used for therapeutic purposes under medical supervision."

Over 93 small interventions similar to the drug substitution and needle-exchange programme till December 2005 in eight states by various NGOs and pilot studies conducted in West Bengal found the used needle return rate to be as high as 70%.

Rao added, "India is a busy transit route for drug traffickers moving heroin. Inevitably, this has led to a rise in substance addiction here. Denying this fact any longer would be disastrous for the country's AIDS-control programme, especially because drug addicts are at a higher risk of contracting HIV through sharing needles."

Under the programme, addicts will first be asked to exchange their syringes with safe needles by former addicts, from drop-in points on streets and clinics that will be five minutes away from injecting zones. They will then be put under the 6-9 month-long OST programme, in which substance abusers will keep an oral pill of Bupernorphin called Addnock under their tongue for five minutes everyday in front of a supervising doctor.

This strategy has worked in China, US, Holland, Germany and Australia. In cities where needle and syringe-exchange practices have been introduced, the rate of HIV infection among injecting drug users was an average of 6% compared with an average 21% in cities where the programmes had not come in.

Prakasam tops list on HIV affected

25 JUN 2007

By OUR CORRESPONDENT

Hyderabad, June 24: Prakasam tops in HIV-affected districts of the State as per the latest statistics released by AP Aids Control Society.

State capital Hyderabad ranks third.

According to AP State AIDS Control Society (APSACS), West Godavari tops in urban section with 3.08 per cent HIV prevalence among ante-natal women, followed by Mahbubnagar and Prakasam.

In rural areas, Nizamabad is on the top of the list with 3 per cent, followed by East Godavari and Prakasam.

"Last year Mahbubnagar had a very low per cent of prevalence. Now it is in fourth position. This may be due to migrant labourers," said APSACS director Ashok Kumar.

"Overall HIV prevalence has come down in the State. This is a good sign," said Mr Kumar.

In order to curb the spread of AIDS in urban areas, APSACS is teaching students how to use a condom and how to appear for an interview through a handbook, *My future My Choice.*

"Job search strategy is also part of this curriculum. We have printed a booklet resembling an air ticket for migrant labourers. The air ticket is a guide to avoid HIV infection," said the APSACS director said.

The handbook will be distributed to all the students in colleges, particularly to red ribbon clubs formed in the State.

Treatment for HIV+ kids to be improved

8/6/07-DC

By P. SRIDHAR

Karimnagar, June 7: The State government and non-governmental organisations are giving added focus to anti-retroviral paediatric therapy in the district with more children being infected by HIV.

Of the 982 children who took blood tests at the eight VCTCs in the district last year, 172 were found to be HIV positive. This year, until May, 21 children tested positive.

Experts say that the real number of HIV affected kids would be much higher than that.

As of now, 76 children are registered with the anti-retroviral therapy centre at the district headquarters hospital in Karimnagar. Of them, 36 are undergoing therapy.

The HIV/AIDS Alliance Andhra Pradesh unit launched the START-AP project in the district last week to help APSACS to improve anti-retroviral therapy.

Alliance NGO partners, the Karimnagar Network of People Living with HIV/AIDS and the Clinton Foundation will play a strategic role in this.

One of the aims of the project is to ensure access for infected kids to experts in paediatric HIV treatment.

BOTTOMLINE

"We are hiring paediatricians to monitor treatment to HIV-affected kids as the drugs have to be administered continuously," said Dr Samuel Sukumar, additional DM & HO (Leprosy & AIDS). The two medical officers at the centre have also undergone training in pediatric HIV treatment.

"Anti-retroviral drugs should be administered to the HIV-affected kids under the supervision of an expert paediatrician to avoid side effects," said Dr M. Parvez, an expert in HIV prevention. "The new project will help integrate existing HIV prevention programmes with anti-retroviral services."

Apart from the 36 kids, about 300 HIV infected persons are also taking treatment from the centre. Dr Sukumar said that a proposal to provide nutritious diet packets to HIV patients in the district was also being considered.

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Uttarakhand registers spurt in HIV cases

Sunil Kumar | Dehradun

A sudden spurt in the number of HIV/AIDS cases has woken up Uttarakhand out of slumber. According to government hospital records, around 40 cases of HIV positive patients are being reported every month across the State.

The number may go up if patients who have been treated in private hospitals are also taken into account. Reportedly 911 people have been tested HIV positive between November 2000 and April 2007. Of this 400 cases were reported in 2006 alone. Of the 911 HIV positive cases, 140 turned into full-blown AIDS cases and 25 patients died.

Official data indicates that the real picture could be worse. Talking to *The Pioneer*, Dr AP Magmain, in-charge of Uttarakhand State AIDS control society said, "Only economically weak patients come to government testing centres for check up. Those who can afford it generally prefer going to private labs."

Studies show that more than 350 of 911 HIV positive patients are women, and nearly 30 per cent of them got infected from their husbands who are employed in cities like Delhi and Mumbai.

"Some of the men indulge in unprotected sex and contract the disease. When they return to their homes in Uttarakhand, they in turn infect their wives who come to know about their condition after several years," Magmain added.

Most of the HIV positive cases have been reported from Dehradun, Nainital, Udham Singh Nagar and Haridwar districts of Uttarakhand. Efforts are on to fight the disease in these areas.

Over 1,650 sex workers in these districts have been informed about the disease and asked to take precautionary measures. About 750 street children and over 6000 truckers too have been counselled by various NGOs.

PIONEER
25 JUN 2007

World Bank aid to fight HIV

29 MAY 2007

THE STATESMAN

Statesman News Service

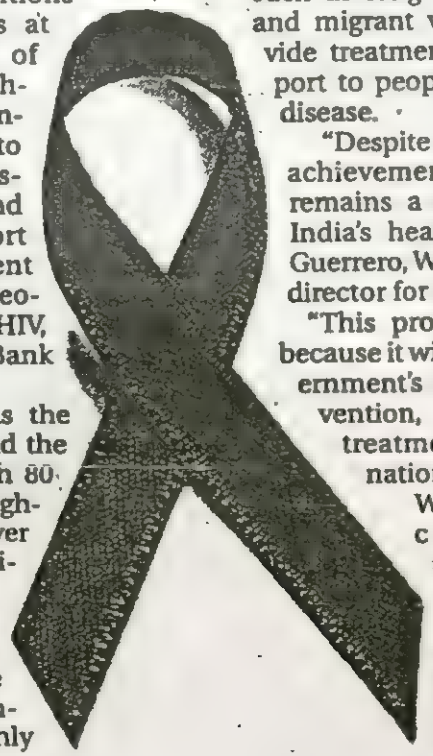
NEW DELHI, May 28: The World Bank has approved a $250 million credit to support the third phase of India's AIDS control programme, which is aimed at improving prevention efforts and amplifying care, support, and treatment strategies.

India has embarked on an ambitious goal of halting and reversing the HIV/AIDS epidemic by 2011, ahead of the 2015 target of the sixth millennium development goal.

The country has developed and enhanced its response to the epidemic over the last two decades. This sustained commitment has yielded many benefits, including an effective blood safety programme, increased numbers of clinics to treat sexually transmitted diseases and voluntary counselling and testing centres for HIV, special interventions among groups at highest risk of HIV, establishment of prevention of parent to child transmission services and care, support and treatment services for people living with HIV, the World Bank said.

Prevention is the top priority and the aim is to reach 80 per cent of high-risk groups over a five-year period.

The programme also aims to scale up interventions in highly vulnerable groups such as long distance truckers and migrant workers and provide treatment, care and support to people living with the disease.



"Despite these impressive achievements, HIV/AIDS remains a serious threat to India's health gains," Isabel Guerrero, World Bank country director for India, said.

"This project is important because it will support the government's scaling up of prevention, care, support and treatment interventions nationwide.

While the disease is concentrated among high risk groups, increasing prevalence among women and in rural areas points to generalised epidemics in some states," the official said.

The third phase would focus on scaling up of interventions to reduce unsafe sex among sex workers and their clients and reducing HIV transmission among injecting drug users, and among highly vulnerable mobile populations.

In many parts of the country, prevention efforts to reduce HIV prevalence among groups with high risk behaviour have not achieved full coverage, the World Bank said.

The NACP began providing free anti-retroviral therapy (ART) in high prevalence states in April 2004 and now has over 80,000 people on treatment.

It is estimated that during the third phase, care and support services would be provided to 380,000 people living with HIV and AIDS and drugs to about 340,000 people, 40,000 of which would be children.

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World Bank reports AIDS falling in Africa

17/6/07

Abidjan, June 16: The pace of the deadly AIDS epidemic is slowing down in some African countries due to a series of effective prevention measures, Cote d'Ivoire media quoted a World Bank report as saying.

According to the report released Friday, in some African countries such as Uganda, Kenya, Zimbabwe and urban areas of Ethiopia, Rwanda, Burundi and Malawi, the pace of the AIDS epidemic is slowing as communities are empowered to help themselves with better delivery of condoms and life-saving treatments. But the report did not give specific figures.

Meanwhile, it pointed out that the efforts by African countries in preventing and curing AIDS is still not sufficient. In 2006, more than 2 million people died of AIDS and some other 24.7 million were infected on the African continent, the report added. South Africa, however, has the world's second largest number of people infected by HIV, approximately 5.5 million out of a total population of 47 million.

The report suggested African countries strengthen and improve their social immune system, discourage habits which went against AIDS prevention, and rectify social activities. *(Xinhua)*

The road to eradicating poverty

Jorge Heine

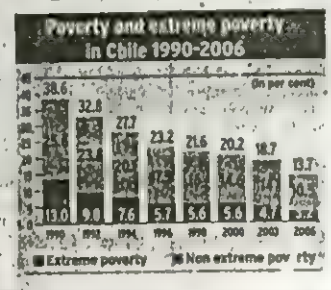
A mix of market-friendly economic policies and proactive social policies that deploy the resources derived from this growth to empower the weaker sections to take charge of their own lives would be one way to reduce the number of the poor.

AT A dinner party a few days ago a columnist and former diplomat asked me, "Has Chile joined the Left-ward trend in Latin America?" I replied, "Chile has been ruled by a Centre-Left coalition for 17 years, and its current president (Michelle Bachelet) and the previous one (Ricardo Lagos) are Socialists." Far from "joining" the Left trend in Latin America, Chile has been at the forefront of it for many years.

In this period, Chile has had the best economic performance in Latin America, as well as the best of any country outside Asia. At present, the Government's biggest "problem" is what to do with a $11 billion fiscal surplus. If this runs counter to the conventional wisdom in some quarters, that the Left today is unable or unwilling to promote policies that are both growth-conducive and equity-enhancing, or that Chile's current boom is simply due to high commodity prices (which admittedly help), the latest figures on poverty reduction should be a wake-up call.

According to the recently released findings of the National Characterisation Socio-economic Survey (CASEN), undertaken since 1987 to measure poverty levels, in Chile the poverty rate fell from 18.7 per cent in 2003, to 13.7 per cent in 2006, the biggest drop since 1990 (when it was 33.6 per cent). The number of people in extreme poverty has also fallen, from 4.7 per cent in 2003 to 3.2 per cent in 2006. For the first time, the share of people under the poverty line in the rural areas (12 per cent) is lower than in the urban areas (14 per cent). The inequality of income distribution, though still high, as measured by the Gini coefficient dropped from 0.57 to 0.54. Three of Chile's 13 regions, Antofagasta, Aysén, and Magallanes, show single digit poverty rates; the way things are going, by 2010, the year of Chile's Bicentennial, the rate for the whole country could be in single digits and extreme poverty at 1 per cent.

In addition to its overall economic performance — growth is projected to reach 6 per cent, exports a record $65 billion, and per capita income $9,000 — Chile has also progressed on one front some regard as even more important than just growth. According to the UN Economic Commission for Latin America and the Caribbean (ECLAC), Chile has the lowest share of the population under the poverty line in the region. Besides, among seven countries surveyed (the others are Mexico, Brazil, Ecuador, El Salvador, Costa Rica, and Colombia), it has made the most progress in poverty reduction over the past six years with an average drop of 5 per cent a year.



The challenge of poverty reduction, a very significant one in India, is one that arouses strong passions among specialists. While some argue that economic growth is the only remedy, and that the trickledown effect will ultimately take care of the dispossessed, others consider redistributionist policies the only way forward. To judge from the Chilean experience, the truth, as often happens, lies somewhere in between. Without strong economic growth, there is nothing to redistribute. One of government's prime duties is to create the sort of macroeconomic environment that is business-friendly and conducive to high investment rates, which, in turn, lead to high growth and job-creation (the best help anyone can get is a job). On the other hand, this is not enough. In any country, there will be large numbers of people who, for a variety of reasons, are left behind and need assistance to find their feet again. This is where social policies come in. If overdone, or badly implemented, they can be counterproductive, and do more harm than good. If well conceptualised, designed, and applied, they can do much to lift the socially handicapped into the mainstream of society.

Since its return to democracy in 1990, Chile has done well because of its imaginative, well-crafted public policies, in areas as varied as international trade, public infrastructure, capital controls, and telecommunications. If this is true for economic policies, it is also for social ones.

During the authoritarian period under General Pinochet (1973-1990), social expenditure as a share of GDP went down, and the main thrust of social policies was to "target" them as much as possible, meaning focussing whatever social budget was left on the poorest sections of society. It is difficult to quarrel with the notion that social expenditure should be focussed on those who need it most, but a more differentiated conception of what effective social policies entail is needed.

As sociologists Dagmar Raczynski and Claudia Serrano have argued, the broad notion of "social policy" encompasses three distinct spheres: sectoral policies (education, health, social security, housing), social development policies (not as clear-cut and well-ensconced in specific Ministries as the former, but more focussed on vulnerable groups and more flexible and dynamic in their implementation), and social assistance programmes designed to provide specific subsidies to groups or individuals who need them.

The reason Chile has done so well in eradicating poverty (in fact well beyond what could be expected from sheer growth alone — from 2003 to 2006 economic growth was 16.5 per cent and poverty reduction 24.9 per cent) is it has gotten the "mix" of these various components right.

A sine qua non for this was to secure enough resources so that social expenditures would not endanger fiscal stability. Tax reform was enacted in1990 — raising VAT from 16 to 18 per cent, it is now at 19 per cent, and effectively establishing a corporate tax rate of 17 per cent, which, until then, as unbelievable as this may sound, did not exist. These resources, in turn, have allowed for a steady increase in social expenditures as a share of GDP, from 13 per cent in 1990 to 16 per cent today, close to 70 per cent of the fiscal budget.

Expenditure on education has tripled, and Chile today has almost universal coverage in primary education, 90 per cent coverage in secondary education, and 30 per cent in post-secondary. The housing deficit has been cut to half of what it was in 1990, and 73 per cent of all households live in their own homes. Public health expenditure has also tripled (albeit still reaching only 2.9 per cent of GDP), infant mortality has declined to 7 for every 100,000 infants born alive, and life expectancy is 73 for Chilean males and 79 for females, figures comparable to countries such as the United States.

In many ways, though, the most interesting part of Chile's social policies, and, arguably, a key reason for this enormous progress towards the eradication of poverty, has been the panoply of fine-tuned policy instruments designed to the specific needs of a variety of vulnerable groups — women, youth, aboriginals, those living in squatter camps. For them particular programmes — 400 at last count involving 80 institutions — have been tailored and applied. They are not driven by "welfarism"; that is, the idea that monetary transfers is all people need to get out of poverty — though such transfers may be part and parcel of them, at least for a time. Rather there is the recognition that their condition reflects a broader predicament to be diagnosed and acted upon, with their own active participation and involvement, not just as individuals and families but also as citizens and communities.

Housing, schooling, employment, and appropriate public spaces, in addition to matters as subjective as identity and self-esteem, are all elements of it. Chile Barrio, a programme devised in the mid-1990s, that identified all squatter camps in the country and set out to eradicate them (it is still not quite there, but it may by 2010) is a good example. Another is Chile Solidario, which identifies families in extreme poverty and appoints a social worker to work with each of them, empowering them to develop the social skills needed to get out of their condition.

One reason the Left has come to power in so many countries in Latin America over the past few years is because of the high rates of poverty that still pervade many of our societies, as well as the high inequality that marks them. Chile's path so far shows that there is hope to move forward in this regard. There is no magic wand to be waved to do away with what constitutes perhaps the key development challenge of our time. But the right mix of market-friendly economic policies and pro-active social policies that deploy the resources derived from this growth not simply as transfer payments but to empower the weaker sections of society to take charge of their own lives would seem to be one way to cut down on the number of poor.

(Jorge Heine is the Ambassador of Chile to India.)

CARTOONSCAPE

TOWARDS SUSTAINABLE DEVELOPMENT

Dr. P. Venkatachalam

Sustainability is essentially about humans' ability to learn, adapt and survive in changing circumstances". "Development which meets the needs of the present without compromising the ability of future generations to meet their own needs".

Sustainable development is about:

"Ensuring a better quality of life for everyone, now and in the future. It involves the bringing together of social, environmental and economic issues into one over-arching objective". "Treating the earth as though we intend to stay". "Living on earth's income rather than eroding its capital".

So, the way we use the earth now is unsustainable. Large numbers of the world's population go hungry and don't have clean water. The way we burn fossil fuels is adding to climate change, we are depleting all sorts of resources and polluting our environment in variety of ways. Sustainability is not about keeping things as they are-things are not ok now. It's about the needs of people-all of those alive now and future generations. It is about ensuring that there will be enough healthy food, clean air and water for every one on the planet. It is about improving the world and then trying to keep it ok for every one.

A sustainable world would have to be one where the whole of the world's population have enough healthy food, have a clean water supply, have a adequate homes to live in, are free from the threat of violence, racism or caste discrimination, live in a clean, safe environment, have access to good health services and education can find beauty and fun around them and this could continue indefinitely.

In order to achieve this we would have to burn less fossil fuels in the industrialized world, ensure that every one has an equal share of resources, consume more locally produced products, stop using destructive chemicals in farming and industry I consume less useless products.

What things can be done?

- Discuss what sustainability / sustainable development are all about and what changes people could make in their own lives.
- Measure energy use (fuel for heating electricity, fuel for cooking and heating water amounts and pattern of use over the year), transport patterns, waste produced food eaten and litter.
- Sustainability is all about caring for the whole of the present population, future generations and the natural environment. These values can't be prioritized without caring for the community that one is part of strong anti-bullying and anti cast action is an essential part of sustainability.
- Reduce use of cars - set up car share schemes, develop use of buses and trains and enable more walking and cycling.
- Plant trees. Trees are beautiful, create habitats for animals, hold the soil together, absorb CO2 and can be used as a renewable fuel or a building material when cut down.
- Use renewable source of energy.

There are very many things which can be done in every one's house, some which address the 'big issue' of burning fossil fuels and others which make the local environment pleasanter. Both are part of the process. Very often the biggest impacts are made by doing things which most people do not see (like using cycle instead bike) while things like preventing littering which has a mainly aesthetic impact, are very visible. It is worth getting rid of litter because it is easy to do, people feel that something is happening they get into habits of care which they will hopefully carry into other areas of activity and litter looks horrible, but arguably its presence has virtually nothing to do with sustainability. □

A.E.C. and R.I., TNAU, Coimbatore -3.

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Quality of life is the key

28/6/07 HT

Special Correspondent

- USAID-backed meet dwells on Central, State intervention
- Cities in India alone contributed to 60 per cent of GDP

HYDERABAD: A national-level policy as well as interventions are required to implement good governance practices to improve quality of life for all sections in cities, said Joint Secretary, Union Ministry of Housing and Poverty Alleviation P.K.Mohanty here on Wednesday.

He was delivering keynote address at the inaugural of four-day Regional Conference on Good Urban Governance in Asia, organised by Administrative Staff College of India (ASCI) and supported by the USAID with delegates from Afghanistan, Bangladesh, Indonesia, Nepal, Sri Lanka and Thailand besides India.

Challenges

Mr. Mohanty said, in the wake of rapid urbanisation, unless Central, State and city administration partnered together, good governance practices would not trickle down. Jawaharlal Nehru Urban Renewal Mission was one such initiative and to ensure its success, reforms should be launched to resolve the challenges in urban planning, finance, poverty and urban governance.

In urban planning, master and city development plans mostly remained diverse. For instance, there was no integration of transportation in land use while transportation should ideally lead development. Similarly housing for poor and conservation of resources remained challenges, he said.

Under JNURM the approach was to focus on city development plan in 63 cities in the country including Hyderabad with an outlay of Rs.50,000 crore. The urban finance system was not adequate in cities as they were dependent only on property tax. When cities develop becoming growth engines, focussed approach on slum upgradation, drainage, drinking water, housing should become imperative and Rs.20,000 crore were allocated for it under JNURM, Mr.Mohanty said . He also said it was time municipalities got professional managers to man their various wings to meet parameters of good urban governance.

Focus

US Consul General for South India David Hopper said cities in India alone contributed to 60 per cent of GDP and with better infrastructure, services, economic growth could be even higher.

Director of Urban Governance and Infrastructure Development, ASCI, V.S.Chary said the focus of conference was to define good urban governance, learn from the good experiences and success stories in Asian countries which were also witnessing rapid urbanisation and scale them up for replication elsewhere to tackle similar situations.

A separate session would be held on 'Building resilient cities' with better planning and building by-laws.

Findings on birth order and IQ prompt debate

26/6/07 H

Do eldest children really have a significant edge in IQ over the closest sibling?

Benedict Carey

New evidence that eldest children develop higher IQs than their siblings has intensified the debate over two of the most stubborn questions in social science: What are the family dynamics that enhance intelligence? And can they — and should they — be changed?

The new findings, from a landmark study published on Friday last, showed that eldest children had a slight but significant edge in IQ — an average of three points over the closest sibling. And it found that the difference was not because of biological factors but the psychological interplay of parents and children. Predictably, the study set off a swarm of Internet commentary from parents, social scientists, and others, speculating about what in families could enrich one child's intellectual environment more than others.

"Anyone with siblings wonders about this," said Sue Monaco, 51, of Delaware, who has two sons and five siblings. She was one of about 150 readers who posted questions on Friday to a *New York Times* Web forum about the study.

Researchers acknowledge that few of the family variables affecting intelligence are well understood, and some argue that peer influences are eventually more significant. But studies suggest that two elements are important during childhood: the perceived role a child has in the family; and the apparent benefit a child receives when he or she tutors someone else, like a younger sibling.

Well before entering the high school hothouse of geeks and jocks, children who grow up with siblings get tagged with labels: The airhead, the klutz, the whiner. And then there is the serious one, little Mr. or Ms. Responsible, who most often is the eldest, psychologists have found. Studies suggest that other family members tend to consider the eldest the most conscientious of the siblings, more likely to achieve academically. At least for some firstborns, that role may be self-fulfilling.

Psychologists say that filling the role of the responsible firstborn, while important to academic achievement, still does not account for eldest children's higher average scores on intelligence tests. Robert Zajonc, a psychologist at Stanford University, has argued that, in fact having a younger sibling or two diminishes the overall intellectual environment for eldest children — who otherwise would be benefiting from the rich vocabulary and undivided attention of parents.

This helps explain why, under the age of 12, younger siblings actually outshine older ones on IQ tests.

Something else is at work, Professor Zajonc said, and he has found evidence that tutoring — a natural role for older siblings — benefits the teacher more than it does the student. "Explaining something to a younger sibling solidifies your knowledge and allows you to grow more extensively," he said. "The younger one is asking questions, and challenging meanings and explanations, and that will contribute to the intellectual maturity of the older one." (Only children receive the benefit of more parental attention but miss the opportunity to tutor a younger brother or sister.) Ms. Monaco, who has two sons in their 20s, said her oldest was expected to help his brother from an early age. "He was a teacher to his brother, and he has grown up to be a more intense thinker; he's studying business management," she said. Parents who recognise the different niches that their children fill can enhance the family's intellectual environment by exploiting each child's expertise, researchers say. "Given the evidence we have on this, I would as a parent encourage late-born siblings to take on teaching roles, with other siblings or other children," said Paul Trapnell, a psychologist at the University of Winnipeg.

Professor Trapnell compared this process to the so-called jigsaw approach used in classrooms, in which complex projects are divided up and each child becomes an expert in a particular task and instructs the others.

Younger siblings often have something more to pass on than the tricks of their favourite hobby, or the philosophy behind their social charm. Evidence suggests that younger siblings are more likely than older ones to take risks based on their knowledge and instincts. It is important to keep in mind, too, that the new study found average difference in IQ; the scores varied widely from family to family. In many families, younger brothers and sisters eventually took the lead in IQ.

Moreover, experts have long noted that while even slight differences in IQ score can be important for some, the test measures a narrow set of skills. Excessive attention to it can blind parents to the diverse and equally rich expertise that later-born children usually develop. The best way to react to the news, some psychologists said, is to relax. — New York Times News Service

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How the President of India is elected

4,896 elected members of Parliament and Legislative Assemblies will vote on July 19

14/6/07-H

J. Venkatesan

NEW DELHI: A total of 4,896 elected members of Parliament and Legislative Assemblies will vote in the 13th presidential poll on July 19.

The earlier elections were held in 1952, 1957, 1962, 1967, 1969, 1974, 1977, 1982, 1987, 1992, 1997 and 2002.

The President is elected under the Presidential and Vice-Presidential Elections Act, 1952, and the rules made thereunder, viz. "The Presidential and Vice-Presidential Elections Rules, 1974."

Calculating value of votes

The Constitution (84th Amendment) Act, 2001 provides that until the relevant population figures for the first census to be taken after 2026 are published, the population of the States for calculating the value of votes shall mean the population as ascertained in the 1971 census.

After calculating the total value of votes polled by each candidate, the Returning Officer totals up the value of all valid votes polled. The quota for declaring a candidate elected is determined by dividing the total value of valid votes by '2' and adding 'one' to the quotient, ignoring the remainder, if any.

For example, assuming that the total value of valid votes polled by all candidates is 1,00,001, the quota required for getting elected is: 1,00,001 + 1 = 50,000.50 + 1 (Ignore.50);

Quota = 50,000+1 = 50,001.

After ascertaining the quota, the Returning Officer has to see whether any candidate secured the quota for being declared elected on the basis of the total value of first preference votes polled by him/her. If no candidate gets the quota on the basis of first preference votes, the Returning Officer will proceed with the second round of counting, during which the candidate having the lowest value of votes of first preference is excluded and his votes are distributed among the remaining candidates according to the second preference marked on these ballot papers. The other contestants receive the votes of the excluded candidate at the same value at which he/she received them in the first round of counting.

The Returning Officer will go on excluding the candidates with the lowest number of votes in subsequent rounds of counting until either one of the continuing candidates gets the required quota or only one candidate remains in the field and will declare him/her elected.

Forfeiture of deposit

A candidate will forfeit his/her deposit of Rs. 15,000 if he/she is not elected and the number of valid votes polled by him/her does not exceed one-sixth of the number of votes necessary to secure the return of a candidate at such an election. In other cases, the deposit will be returned.

A petition challenging an election to the office of President may be filed in the Supreme Court by any candidate or by 20 or more electors joined together as petitioners within 30 days of publication of the declaration containing the name of the returned candidate.

Recipes